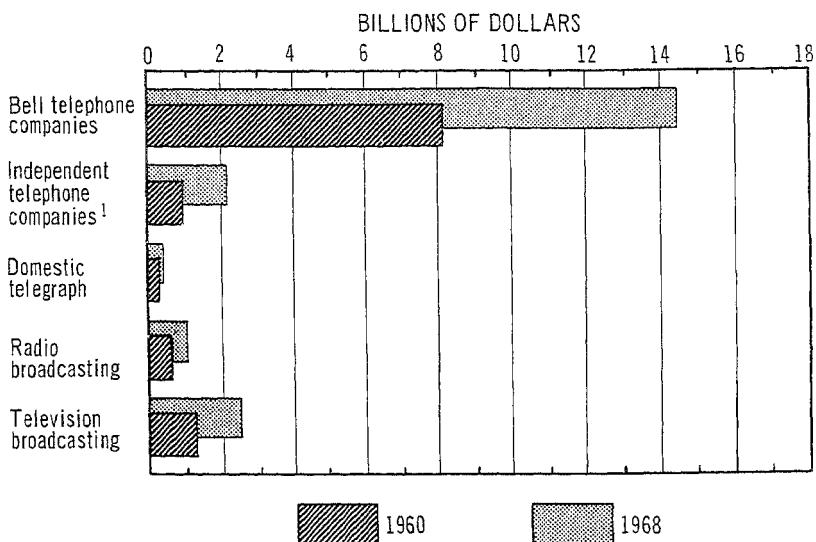


**FIG. XXX. OPERATING REVENUES OF SELECTED COMMUNICATIONS MEDIA: 1960 AND 1968**

[See tables 750, 751, 754, 761, and 763]

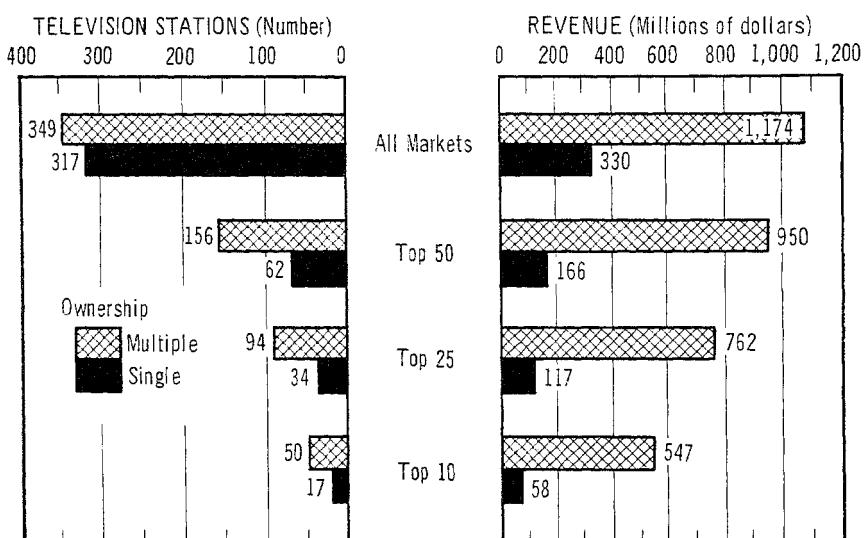


<sup>1</sup> Includes estimates for nonreporting companies; see footnote 1, table 754.

Source: Chart prepared by Dept. of Commerce, Bureau of the Census. Data from American Telephone & Telegraph Company, United States Independent Telephone Association, and Federal Communications Commission.

**FIG. XXXI. TELEVISION STATIONS—NUMBER AND REVENUE, BY TYPE OF OWNERSHIP AND MARKET LOCATION: 1968**

[See table 762]



Source: Chart prepared by Dept. of Commerce, Bureau of the Census. Data from Federal Communications Commission.

## Section 18

### Communications

This section presents statistics on usage, finances, and operations of the various communications media: Postal service, telephone, telegraph, radio, television, newspapers, and books. Data on the postal service are included in the *Annual Report of the Postmaster General*. Statistics on revenues, volume of mail, and distribution of expenditures are presented in the Post Office Department's annual *Revenue and Cost Analysis*. Principal sources of wire, radio, and television data are the Federal Communications Commission's *Annual Report*, its annual *Statistics of Communications Common Carriers*, and its annual releases of financial data reported by radio and television stations and networks. Statistics on number and circulation of newspapers and periodicals and on sales of books and pamphlets are issued by the Bureau of the Census in reports of the Census of Manufactures. Annual data on number and circulation of daily and Sunday newspapers appear in *International Yearbook Number*, issued by Editor and Publisher, New York. Monthly data on new books and new editions of books are presented by R. R. Bowker Company, New York, in *Publishers' Weekly*.

**Postal service.**—"Revenue and cost analysis" is the term used by the Post Office Department to describe its system of cost ascertainment. This system utilizes random sampling for observation of the time required to handle various classes of mail and services. The sample results are applied to accounting records to estimate cost by class of service. Incremental cost estimates are also obtained and are used as the basis for postal rate recommendations.

**Telephone and telegraph systems.**—Statistical coverage of wire and radio communications has been concentrated in the Federal Communications Commission since its establishment in 1934. According to the Communications Act of 1934, as amended, the Commission has jurisdiction over carriers engaged in interstate or foreign communications service by means of wire or radio. The Commission requires all except the smallest of these carriers to file annual and monthly reports and requires the companies controlling any but the smallest to file annual reports. Full jurisdiction applies to practically all domestic and overseas telegraph carriers and to the Communications Satellite Corporation but not to a large number of telephone carriers which are engaged in interstate or foreign service only by connection with the facilities of another unaffiliated carrier. However, the gross operating revenues of the telephone carriers reporting annually to the Commission are estimated to cover over 90 percent of the revenues of all telephone carriers in the United States.

**Broadcasting.**—The number of broadcast stations authorized refers to the number licensed or holding construction permits. Total broadcast revenues are defined as total time sales of all networks and stations, less commissions to agencies and plus incidental revenues, such as sale of talent, program material, etc. Reports filed with the Federal Communications Commission by broadcast stations and networks cover substantially all units operating in the United States and its outlying areas.

**Nonbroadcast radio.**—Most of the nonbroadcast radio services are grouped together in what is known as the safety and special radio services, which constitute the greatest number of radio stations licensed by the Federal Communications Commission (see table 757). Utilization of these services by individuals, industry, commerce, and State and local government covers broad fields of operations in connection with protection of life and property, industrial and agricultural production, transportation, disaster, and civil defense.

**Historical statistics.**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1957*. See preface.

## Communications

## No. 743. UNITED STATES POSTAL SERVICE—SUMMARY: 1900 TO 1969

[For years ending June 30. Includes Puerto Rico and all outlying areas except Canal Zone; see table 748. See text, p. 487. See also *Historical Statistics, Colonial Times to 1957*, series R 139-141 and R 145]

YEAR	Number of post offices	FINANCES <sup>1</sup>			Revenue per capita <sup>2</sup>	MONEY ORDERS ISSUED		Sales of postage stamps and other stamped paper	Postage paid under permit (1st, 2d, 3d, and 4th class)	Number of pieces of mail handled <sup>4</sup>
		Revenues	Expenditures <sup>3</sup>	Surplus (+) or deficit (-)		Domestic	International			
1900	76,688	Mil. dol.	Mil. dol.	Mil. dol.	Dollars	Mil. dol.	Mil. dol.	Mil. dol.	Mil. dol. <sup>(5)</sup>	Millions
1905	68,131	102	108	-5	1.34	239	17	94	7	7,130
1910	59,580	153	167	-15	1.82	397	43	140	1	10,188
1915	56,380	224	230	-6	2.43	548	90	202	4	14,850
1920	52,641	287	299	-11	2.85	654	52	256	8	(NA)
1925	50,957	437	454	-17	4.11	1,333	23	380	13	(NA)
1930	49,063	600	639	-40	5.28	1,533	36	508	39	25,835
1935	45,686	705	804	-98	5.75	1,715	52	575	74	27,888
1940	44,024	631	697	-66	4.94	1,821	22	473	96	22,322
1945	41,792	1,314	767	808	-41	5.84	2,095	13	522	27,749
1950	41,464	1,145	1,145	+169	9.44	6,484	21	954	252	37,912
1955	38,316	1,677	2,223	-545	11.14	6,512	16	862	678	45,064
1960	35,238	2,349	2,712	-363	14.33	5,852	31	999	1,136	55,234
1964	34,040	3,277	3,874	-597	18.27	5,031	27	1,245	1,699	63,675
1965	33,624	4,276	4,928	-652	22.40	4,719	22	1,504	2,354	69,676
1966	33,121	4,483	5,276	-793	23.17	4,520	20	1,528	2,329	71,873
1967	32,626	5,102	5,727	-943	24.43	4,706	18	1,579	2,710	75,607
1968	32,260	5,680	6,249	-1,47	25.75	4,697	17	1,636	2,912	78,367
1969	32,064	6,256	7,279	-1,023	28.26	4,682	16	1,799	3,265	79,517

NA. Not available.

<sup>1</sup> After allowance for reimbursements, embossed envelope purchases, indemnity claims, and miscellaneous revenue and expenditure offsets. Revenues, expenditures, and deficits through 1950 include payments and receipts in a year applicable to prior years; beginning 1955, expenditures are shown in year in which obligation was incurred, and revenues in year which gave rise to the earnings, whether collected or accrued. During fiscal 1954, the Department began receiving reimbursement for penalty and franked mail, and discontinued payment of subsidies to airlines. Revenues for 1960 include \$37.4 million reimbursement from the Treasury General Fund for statutory public services. These and other changes affect comparability of figures.

<sup>2</sup> Includes capital expenditures for plant and equipment and cost of materials and supplies, but no provision for depreciation. Also includes costs of certain services rendered to other agencies without reimbursement but excludes costs of certain services rendered to the Post Office Department by other agencies. Beginning 1955, represents obligations incurred. Beginning 1964, represents accrued expense including depreciation on fixed assets, reimbursable work for others, and expenses paid by certain other agencies without reimbursement by the Department.

<sup>3</sup> Based on Bureau of the Census estimated total population as of Jan. 1, including Armed Forces abroad.

<sup>4</sup> Estimates. <sup>5</sup> Service not inaugurated. <sup>6</sup> Includes postal notes issued under act of Congress.

Source: Post Office Dept.; *Annual Report of the Postmaster General*.

## No. 744. POSTAL SERVICE REVENUES, BY SOURCE: 1920 TO 1969

[In millions of dollars. For years ending June 30. Includes Puerto Rico and all outlying areas except Canal Zone; see table 748. See text, p. 487]

REVENUE SOURCE	1920	1930	1940	1945	1950	1955	1960	1965	1969
Total <sup>1</sup>	437	705	767	1,314	1,677	2,349	3,277	4,483	6,256
Ordinary postal revenue	424	686	732	1,247	1,606	2,266	3,189	4,374	6,081
Stamps, postal cards, etc.	380	575	522	954	862	999	1,245	1,528	1,937
Second-class postage paid in money (postage rates) <sup>2</sup>	25	29	23	25	40	64	86	131	181
Other postage paid in money under permit	13	74	177	252	678	1,136	1,699	2,529	3,706
Box rents	6	9	8	11	14	26	29	34	42
Miscellaneous	1	1	3	4	11	41	130	152	215
Money-order revenues	10	17	24	47	63	66	81	59	62
Postal Savings System income <sup>3</sup>	2	2	11	21	8	18	7	3	-
Operating reimbursements	-	-	-	-	-	-	-	47	114

<sup>1</sup> Represents zero.

<sup>2</sup> Net revenue after refunds of postage. Beginning 1965, includes operating reimbursements.

<sup>3</sup> Beginning 1955, includes controlled circulation publications. <sup>4</sup> Includes \$37.4 million appropriated to postal revenues for public services as provided by the Postal Policy Act of 1968. <sup>5</sup> Discontinued April 1966.

Source: Post Office Dept.; *Annual Report of the Postmaster General*.

# Postal Revenue and Employees

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## No. 745. POSTAL REVENUES AND COSTS, MAJOR CATEGORIES: 1969

[In millions of dollars, except as indicated. As of June 30]

MAIL AND SERVICE	REVENUES AND REIMBURSEMENTS		DEMONSTRABLY RELATED COSTS <sup>2</sup>					
	Total	Percent of total	Per capita revenues <sup>1</sup>	Total <sup>3</sup>	Revenue as percent of total	Direct labor	Transportation	Overhead
<b>Total, all mail and services</b>	<b>6,255.9</b>	<b>100.0</b>	<b>\$30.93</b>	<b>3,656.0</b>	<b>171.1</b>	<b>2,759.1</b>	<b>477.6</b>	<b>324.0</b>
First-class mail <sup>4</sup>	3,135.4	50.1	15.50	1,691.5	185.4	1,456.5	61.4	172.4
Airmail	215.7	3.4	1.07	165.3	130.5	132.0	16.8	16.5
Priority mail <sup>5</sup>	269.8	4.3	1.33	88.8	303.8	30.9	54.1	3.8
Second-class mail <sup>6</sup>	147.4	2.4	.73	349.8	42.1	291.4	30.7	27.7
Publishers' mail	143.4	2.3	.71	345.7	41.5	288.0	30.4	27.3
Outside the county:								
Regular rate publications	122.0	2.0	.60	238.8	51.1	197.2	22.8	18.8
Other	10.6	0.2	.05	73.2	38.8	60.9	6.5	5.8
Within the county and fees	10.8	0.2	.05	33.7	22.0	29.9	1.1	2.7
Controlled circulation publications <sup>7</sup>	32.3	0.5	.16	15.0	215.3	10.7	3.2	1.1
Third-class mail <sup>8</sup>	781.5	12.5	3.86	460.1	169.9	374.3	37.0	48.8
Bulk rate	650.3	10.4	3.22	362.0	287.2	292.3	32.2	37.6
Single piece rate and fees	131.2	2.1	.65	98.1	124.4	82.0	4.8	11.2
Fourth-class mail <sup>9</sup>	831.2	13.3	4.11	541.5	153.5	323.2	177.1	41.2
Zone rate mail	738.2	11.8	3.65	435.5	189.5	254.0	148.9	32.6
Parcels	704.2	11.3	3.48	422.7	166.6	244.1	146.9	31.7
Catalogs and fees	34.0	0.5	.17	12.8	260.2	9.9	2.0	.9
Special fourth class rate	89.3	1.4	.40	99.4	89.8	64.7	26.6	8.1
Library rate and fees	3.7	0.1	.02	6.6	53.0	4.5	1.6	.5
Government mail	181.9	2.9	.90	66.4	273.9	31.8	31.3	3.3
International mail	255.2	4.1	1.26	130.7	195.3	57.3	65.5	7.8
Special services	233.8	4.5	1.40	74.7	196.0	49.4	-	1.4
Other <sup>10</sup>	121.7	1.9	.60	2.1	-	1.5	.5	.1

<sup>1</sup> Represents zero. <sup>2</sup> Based on Bureau of the Census estimated population as of Jan. 1, including Armed Forces abroad.

<sup>2</sup> Costs which, by analysis, can be demonstrated to vary in response to changes in volume of a particular class or category of service or, even though fixed, to result from providing one specific class or category of service.

<sup>3</sup> Includes other direct and specific fixed costs not shown separately.

<sup>4</sup> May be any mailable matter not exceeding 70 lb.; all matter wholly or partly in writing or typewritten must be sent 1st-class. Usually includes regular and airmail letters and postal and post cards; business reply mail; parcels sealed against inspection weighing 13 oz. or less; and air parcels and all priority parcels weighing over 13 oz.

<sup>5</sup> Airmail, special delivery, and any other mail having priority over regular service mail.

<sup>6</sup> Publications meeting specified issuance requirements. Covers in-county publications; out-of-county publications including ordinary commercial, nonprofit, and classroom publications, and those designated as science of agriculture; and controlled circulation publications. Includes transient mail, not shown separately.

<sup>7</sup> Regularly issued trade magazines and certain "shoppers" of at least 24 pp. and 25 percent nonadvertising, circulated free. <sup>8</sup> Bulk rate circulars and books, nonprofit bulk, and miscellaneous advertising and small pieces, all weighing less than 16 oz.

<sup>9</sup> Parcel post, catalogs, books, records, and all other mailable matter not included in 1st, 2d, or 3d class.

<sup>10</sup> Includes free mail for the blind and handicapped, nonpostal services for other agencies, and unassignable revenues.

Source: Post Office Dept.; annual report, *Revenue and Cost Analysis*.

## No. 746. POST OFFICE EMPLOYEES, BY TYPE: 1950 TO 1969

[As of June 30. Includes Puerto Rico and all outlying areas except Canal Zone; see table 748. See *Historical Statistics, Colonial Times to 1957*, series R 161, for total employees]

TYPE OF EMPLOYEE	1950	1955	1960	1965	1967	1968	1969
<b>Total</b>	<b>500,578</b>	<b>511,613</b>	<b>562,868</b>	<b>595,512</b>	<b>716,603</b>	<b>730,977</b>	<b>739,002</b>
Substitute (part-time)	136,804	144,712	153,881	148,118	207,549	198,676	192,821
Regular	363,774	366,901	408,987	447,394	509,054	532,301	546,181
Postmasters	145,004	142,233	35,165	33,304	32,182	31,736	30,970
Post office supervisors and technical personnel	(2)	(2)	27,070	29,863	32,775	34,903	36,741
Post office clerks and mail handlers <sup>1</sup>	169,148	174,920	171,914	188,460	230,181	238,774	244,394
City carriers	90,216	91,418	109,749	132,522	147,781	155,104	163,628
Rural carriers	32,553	32,022	31,296	30,981	30,756	30,556	30,945
Other	26,853	26,308	33,783	32,264	35,379	37,928	39,503

<sup>1</sup> Includes assistant postmasters: 3,540 in 1950, and 3,917 in 1955. <sup>2</sup> Included in clerk-mail handler totals.

<sup>3</sup> Includes mobile unit employees.

Source: Post Office Dept.; *Annual Report of the Postmaster General*.

## No. 747. POST OFFICE MAIL, BY CLASSES: 1950 TO 1969

(*Pieces of mail in millions, except per capita; weight of mail in millions of pounds.* For years ending June 30. Includes Puerto Rico and all outlying areas except Canal Zone; see table 748. For definition of classes of mail, see footnotes, table 745. See also *Historical Statistics, Colonial Times to 1957*, series R 145-160)

CLASS OF MAIL	1950	1955	1960	1965	1967	1968	1969
Pieces of mail, total.....	45,064	55,234	63,675	71,873	78,367	79,517	82,005
Domestic.....	44,646	54,722	63,115	71,294	77,730	78,713	81,178
Per capita <sup>1</sup> .....	287	324	341	357	380	393	401
1st class and airmail.....	25,333	30,180	34,591	30,697	44,109	45,132	48,068
Priority mail.....	168	184	193	205	223	225	238
Per capita <sup>1</sup> .....	(X)	(X)	(X)	(X)	(X)	116	179
2d class.....	(X)	(X)	(X)	(X)	(X)	1	1
2d class.....	6,265	6,740	7,535	8,600	8,711	8,907	9,206
Per capita <sup>1</sup> .....	42	41	42	46	46	44	46
3d class.....	30,343	15,050	17,910	10,454	20,985	20,664	19,622
Per capita <sup>1</sup> .....	69	92	100	101	106	103	97
4th class.....	31,179	1,136	1,016	1,045	1,070	1,039	1,031
Per capita <sup>1</sup> .....	8	7	6	5	5	5	5
Controlled circulation publications.....	(3)	85	125	281	414	458	579
Penalty.....	1,472	1,480	1,826	2,088	2,239	2,180	2,284
Franked and free for blind.....	34	51	114	129	202	189	209
International <sup>4</sup> .....	417	512	560	579	637	804	827
Regular and airmail <sup>3</sup> .....	311	392	405	472	528	691	708
Parcel post and air parcel post.....	22	9	10	11	10	9	9
Weight of mail, total.....	11,521	10,844	11,689	12,330	13,110	13,238	13,656
Domestic.....	11,176	10,668	11,500	12,152	12,903	12,998	13,427
1st class and airmail.....	673	889	1,059	1,355	1,632	1,528	1,562
Priority mail.....	(X)	(X)	(X)	(X)	(X)	247	347
2d class.....	2,287	2,582	2,883	3,133	3,331	3,344	3,441
3d class.....	3,646	892	1,277	1,705	1,949	1,892	2,018
4th class.....	37,370	6,035	5,879	5,425	5,314	5,245	5,250
Controlled circulation publications.....	(2)	44	63	114	166	186	217
Penalty.....	183	201	305	383	471	510	530
Franked and free for blind.....	17	25	35	38	40	46	62
International <sup>4</sup> .....	345	177	189	178	207	240	229
Regular and airmail <sup>3</sup> .....	29	39	43	55	82	106	102
Parcel post and air parcel post.....	273	83	80	74	70	78	76

X. Not applicable.

<sup>1</sup> Based on estimated total population as of January 1, including Armed Forces abroad.

<sup>2</sup> Effective January 1968. Includes domestic air parcel post. <sup>3</sup> Publications included with 3d and 4th class.

<sup>4</sup> Includes publishers 2d class. <sup>5</sup> Comprises letters, cards, and other articles.

Source: Post Office Dept.; *Revenue and Cost Analysis and Annual Report of the Postmaster General*.

## No. 748. POST OFFICES—STATES AND OTHER AREAS: 1960 AND 1969

[For years ending June 30. Represents independent post offices; excludes branches and stations]

STATE OR OTHER AREA	1960	1969	STATE OR OTHER AREA	1960	1969	STATE OR OTHER AREA	1960	1969
Total.....	35,238	32,064	W.N.C.—Con.			W.S.C.—Con.		
United States.....	35,118	31,947	Missouri.....	1,142	1,017	Oklahoma.....	718	668
N.E.....	2,068	1,846	North Dakota.....	540	484	Texas.....	1,691	1,585
Maine.....	599	521	South Dakota.....	476	433	Mt.....	2,480	2,180
New Hampshire.....	297	256	Nebraska.....	608	568	Montana.....	439	395
Vermont.....	323	297	Kansas.....	790	737	Idaho.....	321	278
Massachusetts.....	519	457	S.A.....	5,541	4,901	Wyoming.....	222	183
Rhode Island.....	62	59	Delaware.....	61	57	Colorado.....	475	428
Connecticut.....	268	256	Maryland.....	486	435	New Mexico.....	404	348
D.C.....			D.C.....	1	1	Arizona.....	242	217
Virginia.....			Virginia.....	1,228	981	Utah.....	266	231
West Virginia.....			West Virginia.....	1,267	1,080	Nevada.....	111	100
North Carolina.....			North Carolina.....	835	799			
South Carolina.....			South Carolina.....	435	404	Pac.....	2,617	2,336
Georgia.....			Georgia.....	714	662	Washington.....	583	505
Florida.....			Florida.....	514	473	Oregon.....	431	373
Alabama.....						California.....	1,305	1,175
Mississippi.....						Alaska.....	215	203
Arkansas.....						Hawaii.....	83	80
Louisiana.....						Other.....	120	117
Other.....						P.R.....	105	100
Other areas <sup>1</sup> .....						V.I.....	5	5
Other areas <sup>1</sup> .....						Other areas <sup>1</sup> .....	10	12
M.A.....	4,394	4,051	E.S.C.....	3,575	3,149			
New York.....	1,757	1,654	Kentucky.....	1,643	1,371			
New Jersey.....	553	525	Tennessee.....	651	610			
Pennsylvania.....	2,084	1,872	Alabama.....	738	674			
E.N.C.....	5,121	4,853	Mississippi.....	543	494			
Ohio.....	1,163	1,092						
Indiana.....	823	770						
Illinois.....	1,365	1,299						
Michigan.....	933	889						
Wisconsin.....	831	803						
W.N.C.....	5,525	5,112						
Minnesota.....	943	893						
Iowa.....	1,026	975						

<sup>1</sup> Comprises Guam, Samoa (Tutuila), Wake, Caroline, Mariana, and Marshall Islands.

Source: Post Office Dept.; *Annual Report of the Postmaster General*.

## No. 749. TELEPHONES, CALLS, AND RATES: 1940 TO 1969

[See also *Historical Statistics, Colonial Times to 1957*, series R 1-13]

ITEM	1940	1950	1960	1964	1965	1966	1967	1968	1969
Telephones (Dec. 31) mil.	22	43	74	89	94	99	104	109	115
Total per 1,000 population	165	281	408	459	478	499	518	540	563
Bell companies <sup>1</sup> mil.	18	37	63	75	79	83	87	91	96
Dial operated <sup>1</sup> mil.	11	28	61	74	78	83	87	91	96
Independent companies mil.	4	6	11	14	15	16	17	18	19
Type of service:									
Business mil.	28	213	21	25	26	27	29	30	32
Residence mil.	214	230	54	64	68	71	75	79	83
Households with telephone service (per cent) <sup>2,3</sup>	37	62	78	83	85	86	87	89	90
Bell companies calls <sup>4,5</sup> bil.	32	63	100	117	125	134	141	150	160
Average daily conversations (millions):									
Bell companies <sup>1,6</sup>	82	145	225	260	287	303	315	330	359
Local <sup>1</sup>	80	139	215	257	273	288	299	312	338
Long distance <sup>1,6</sup>	3	6	10	13	14	15	17	18	21
Independent companies <sup>6</sup>	17	31	60	76	80	86	91	96	103
Local	17	30	58	73	77	83	87	92	99
Long distance <sup>6</sup>	1	1	2	3	3	3	4	4	4
Monthly toll revenue per residence account, Bell system: <sup>7</sup>									
Intrastate (over 24 miles)	(NA)	\$1.40	\$2.42	\$3.19	\$3.46	\$3.84	\$4.13	\$4.52	\$5.00
AT & T long lines (interstate)	(NA)	.69	1.29	2.16	2.34	2.63	2.85	3.13	3.48
Toll rates in effect (Dec. 31), from New York City to: <sup>4</sup>									
Philadelphia	\$0.45	0.45	0.50	0.50	0.50	0.50	0.50	\$0.50	0.50
Chicago	1.90	1.55	1.45	1.45	1.40	1.40	1.40	\$1.30	1.30
Denver	3.25	2.20	1.80	1.80	1.70	1.70	1.60	\$1.55	1.55
San Francisco	4.00	2.50	2.25	2.25	2.00	2.00	1.75	\$1.70	.70

NA. Not available. <sup>1</sup> Comprises American Telephone and Telegraph Company and its principal telephone subsidiaries, which constitute the Bell Telephone System, plus Southern New England and Cincinnati and Suburban Bell Telephone Companies, together with telephones serviced by these companies.

<sup>2</sup> Excludes Alaska and Hawaii. <sup>3</sup> See footnote 2, table 753.

<sup>4</sup> Source: Federal Communications Commission. Toll rates represent rate for station to station, daytime, 3-minute call. <sup>5</sup> See footnote 3, table 753.

<sup>6</sup> Includes messages originating in independent company areas routed in part over Bell facilities.

<sup>7</sup> As of 4th quarter, except 1969, 2d quarter. <sup>8</sup> In effect Aug. 1, 1968.

Source: American Telephone and Telegraph Company, New York, N.Y., except as noted; compiled from reports of Bell System, Southern New England and Cincinnati and Suburban Companies, and unpublished data.

## No. 750. BELL TELEPHONE COMPANIES—SUMMARY: 1940 TO 1969

[Money figures in millions of dollars. As of December 31 or calendar year, as applicable. Comprises American Telephone and Telegraph Company and its principal telephone subsidiaries, which constitute the Bell Telephone System, plus Southern New England and Cincinnati and Suburban Bell Telephone Companies. See also *Historical Statistics, Colonial Times to 1957*, series R 14-27]

ITEM	1940	1950	1960	1965	1966	1967	1968	1969
Central offices, number <sup>1</sup>	7,189	8,656	11,212	13,425	13,687	14,133	14,389	14,759
Miles of wire <sup>2</sup> 1,000	91,274	144,256	307,876	422,623	453,521	480,308	512,250	553,868
Percent total wire mileage in cable	95.8	96.6	97.8	98.5	98.7	98.8	99.0	99.1
Miles of coaxial tube <sup>1,000</sup>	~	63	97	169	197	238	265	279
Miles of microwave radio relay, broad band 1-way channel 1,000	-	8	298	728	895	997	1,130	(NA)
Book value of plant (cost)	4,887	10,375	24,722	36,229	39,317	42,509	46,091	50,480
Depreciation and amortization reserves	1,397	2,905	5,402	7,794	8,551	9,445	10,512	11,554
Operating revenues	1,206	3,342	8,111	11,320	12,419	13,311	14,429	16,058
Local exchange	811	1,997	4,665	6,114	6,517	6,910	7,366	7,979
Toll	361	1,208	3,058	4,706	5,378	5,852	6,472	7,451
Operating expenses <sup>3</sup>	913	2,653	5,586	7,857	8,578	9,246	10,026	11,402
Net income	226	370	1,279	1,887	2,076	2,151	2,153	2,307
Dividends declared <sup>4</sup>	180	263	770	1,144	1,250	1,291	1,389	1,424
Employees, number 1,000	282	535	595	627	667	673	697	755
Wages and salaries	522	1,742	3,283	4,169	4,517	4,792	5,137	5,912

<sup>1</sup> Represents zero. NA. Not available.

<sup>2</sup> Beginning 1965, data on revised basis, not fully comparable with prior years. <sup>3</sup> Excludes drop and block wire.

<sup>4</sup> Includes operating taxes other than Federal income. <sup>5</sup> Includes dividends on all minority holdings of preferred and common stocks, but excludes intercompany dividends.

Source: American Telephone and Telegraph Company, New York, N.Y.; compiled from reports of Bell System, Southern New England and Cincinnati and Suburban Companies, and unpublished data.

## Communications

## No. 751. TELEPHONE AND TELEGRAPH SYSTEMS: 1950 TO 1968

[In millions of dollars, except as indicated. Covers principal carriers filing annual reports with Federal Communications Commission. See also *Historical Statistics, Colonial Times to 1957*, series R 53-65 and R 72-85, for data on telegraph systems]

ITEM	1950	1955	1960	1965	1967	1968
<b>Domestic telephone:</b>						
Carriers .....	71	53	52	54	57	55
Telephones <sup>1</sup> .....	38,525	49,735	65,735	82,424	91,178	96,099
Miles of wire .....	1,000	147,380	204,879	315,541	435,962	534,962
Capital investment:						
Book cost of plant .....	10,702	16,224	25,714	37,967	44,810	48,866
Depreciation and amortization reserves .....	2,979	4,098	5,577	8,105	9,843	10,981
Ratio to book cost .....	27.8	25.3	21.7	21.4	22.0	22.5
Capital stock .....	3,195	5,967	8,383	10,036	10,364	10,606
Income and expenses:						
Operating revenues .....	3,445	5,562	8,365	11,762	13,870	15,097
Operating expenses <sup>2</sup> .....	2,464	3,704	5,024	7,082	8,332	9,034
Operating ratio <sup>3</sup> .....	71.5	66.6	60.1	60.2	60.1	59.8
Net operating income <sup>4</sup> .....	455	764	1,399	2,094	2,495	2,561
Net income .....	372	694	1,250	1,862	2,156	2,133
Employees .....	1,000	565	649	627	655	707
Compensation of employees .....	1,798	2,693	3,384	4,317	4,986	5,363
<b>Overseas telephone:</b>						
Number of overseas calls .....	1,000	745	1,194	3,301	7,515	11,520
Revenue from overseas calls .....	9	16	42	101	146	168
Telephone ocean cable systems .....	number	1	1	5	11	12
Communications satellites .....	number	-	-	-	1	4
Overseas television transmission <sup>5</sup> .....	hours	-	-	33	210	854
<b>Domestic telegraph:</b>						
Number of carriers .....	1	1	1	1	1	1
Revenue messages transmitted .....	1,000	178,904	153,910	124,319	94,302	89,078
Message revenues (includes telex service) .....		152	189	190	192	204
Total operating revenues .....		178	229	262	306	335
Operating revenue deductions .....		167	206	247	282	311
Operating income <sup>6</sup> .....		9	13	11	24	30
Miles of wire in cable .....	1,000	369	388	417	410	404
Miles of aerial wire .....	1,000	929	712	647	554	425
Bell teletypewriter (TWX), messages .....	1,000	14,759	22,794	33,340	46,828	47,347
<b>Overseas telegraph:</b>						
Number of carriers .....		11	10	9	6	6
Revenue messages transmitted .....	1,000	22,578	25,642	28,278	28,830	29,953
Message revenues (includes telex service) .....		42	50	71	78	91
Total operating revenues .....		50	68	87	107	132
Operating revenue deductions .....		45	58	77	87	108
Operating income <sup>7</sup> .....		4	3	6	14	14

<sup>1</sup> Represents zero. <sup>2</sup> Includes Puerto Rico and, beginning 1965, Virgin Islands. Excludes intercompany duplications. Gross operating revenues of carriers reporting in 1968 estimated at 90 percent of all carriers. <sup>3</sup> Includes company, service, and private. <sup>4</sup> Excludes taxes. <sup>5</sup> Ratio of operating expenses, excluding taxes, to operating revenues. <sup>6</sup> After tax deductions. <sup>7</sup> Includes overseas telegraph carriers. Service began July 1965.

<sup>7</sup> After Federal income taxes. <sup>8</sup> Beginning 1965, excludes South American and most Caribbean operations of All America Cables and Radio, Inc.

Source: Federal Communications Commission; annual report, *Statistics of Communications Common Carriers*, and unpublished data.

## No. 752. HOUSEHOLDS WITH TELEPHONES: 1958, 1960, AND 1965

[As of March 1958 excludes Alaska and Hawaii. Based on sample. For definition of terms used, see pp. 2 and 3.]

AREA AND CHARACTERISTIC	TOTAL HOUSEHOLDS (1,000)			PERCENT OF HOUSEHOLDS WITH TELEPHONE			AREA AND CHARACTERISTIC	PERCENT OF HOUSEHOLDS WITH TELEPHONE		
	1958	1960	1965	1958	1960	1965		1958	1960	1965
<b>Total</b> .....	50,474	52,799	57,251	72.5	74.8	80.6	<b>INCOME <sup>2</sup></b>			
Primary families .....							Under \$1,000 .....	(NA)	43.5	55.7
Primary individuals .....	43,426	44,905	47,720	74.7	77.0	82.5	\$1,000-\$1,999 .....	(NA)	50.3	61.5
RESIDENCE <sup>1</sup>	7,047	7,895	9,531	58.6	61.5	71.2	\$2,000-\$2,999 .....	(NA)	57.0	66.7
Metropolitan .....							\$3,000-\$3,499 .....	62.0	66.1	70.7
In central cities .....	(NA)	(NA)	37,395	80.1	81.4	84.6	\$3,500-\$3,999 .....			
Outside central cities .....	(NA)	(NA)	19,222	77.7	77.6	81.4	\$3,400-\$4,499 .....	68.5	65.9	73.4
Nonmetropolitan .....	(NA)	(NA)	18,173	(NA)	(NA)	88.1	\$4,500-\$4,999 .....	70.9	72.8	74.3
Nonfarm .....	(NA)	(NA)	19,858	61.1	64.8	72.6	\$5,000-\$5,999 .....	78.4	76.8	76.5
Farm .....	(NA)	(NA)	16,883	(NA)	(NA)	73.3	\$6,000-\$6,999 .....	82.3	82.8	80.7
Northeast .....	(NA)	(NA)	2,973	45.5	50.3	68.6	\$7,000-\$9,999 .....	86.5	88.4	85.9
North Central .....	(NA)	(NA)	8,080	81.8	86.1		\$10,000-\$14,999 .....	91.5	92.4	92.7
South .....	(NA)	(NA)	19,824	63.1	70.0	80.0	\$15,000-\$24,999 .....	95.9	96.0	96.2
West .....	(NA)	(NA)	75.7	76.2	81.3	85.0	\$25,000 and over .....	97.2	92.9	95.4

NA Not available. <sup>1</sup> For composition of regions, see fig. I, p. xii.

<sup>2</sup> Money income received by primary families and individuals during calendar year.

Source: Dept. of Commerce, Bureau of the Census; *Current Population Reports*, Series P-20, Nos. 95, 111, 146.

# Telephones

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## No. 753. TELEPHONES IN USE, BY STATES: 1968

[As of December 31]

STATE	TELEPHONES (1,000)				Telephones per 100 population	Households with telephone service <sup>2</sup> (percent)	Bell companies calls <sup>3</sup> (mil.)
	Total	Ownership		Type of service			
		Bell companies <sup>1</sup>	All other	Business	Residence		
<b>United States.</b>	<b>109,255</b>	<b>91,122</b>	<b>18,133</b>	<b>30,356</b>	<b>78,899</b>	<b>54.4</b>	<b>89</b>
Alabama	1,408	1,191	217	360	1,048	39.4	76
Alaska	82	-	82	34	48	29.4	(NA)
Arizona	804	780	24	257	547	47.9	80
Arkansas	755	555	200	197	558	37.9	71
California	12,363	9,748	2,615	3,597	8,766	63.5	94
Colorado	1,213	1,193	20	372	841	58.8	92
Connecticut	1,912	1,905	7	508	1,404	64.1	98
Delaware	337	337	-	92	245	62.6	94
District of Columbia	838	838	-	403	435	103.3	95
Florida	3,519	2,395	1,124	1,062	2,437	56.6	88
Georgia	2,075	1,778	297	578	1,497	45.1	80
Hawaii	305	-	395	129	266	50.3	(NA)
Idaho	318	253	65	90	228	45.1	83
Illinois	6,567	5,488	1,079	1,825	4,742	59.4	91
Indiana	2,621	1,692	929	667	1,954	51.5	89
Iowa	1,496	1,033	463	350	1,146	53.9	95
Kansas	1,194	994	200	296	898	51.9	88
Kentucky	1,292	939	353	327	965	40.0	77
Louisiana	1,622	1,537	85	413	1,209	43.2	81
Maine	434	391	43	110	323	44.5	89
Maryland	2,194	2,191	3	588	1,606	57.8	95
Massachusetts	3,233	3,230	3	955	2,278	58.9	96
Michigan	4,711	4,198	513	1,199	3,512	53.5	93
Minnesota	2,001	1,627	374	505	1,496	54.6	97
Mississippi	781	746	35	192	589	33.3	65
Missouri	2,544	2,112	432	676	1,868	54.8	88
Montana	327	274	53	89	238	47.3	85
Nebraska	708	438	340	201	597	55.5	96
Nevada	275	102	173	107	168	60.6	81
New Hampshire	366	348	18	92	274	51.7	94
New Jersey	4,347	4,273	74	1,117	3,230	60.8	94
New Mexico	451	391	60	157	294	44.7	77
New York	11,706	10,794	912	3,639	8,067	64.6	94
North Carolina	2,055	1,086	969	536	1,519	39.9	77
North Dakota	305	215	90	83	222	48.7	92
Ohio	5,742	4,445	1,297	1,459	4,283	53.9	92
Oklahoma	1,323	1,169	154	373	950	52.4	84
Oregon	1,076	839	237	311	765	53.2	89
Pennsylvania	6,874	5,727	1,147	1,698	5,176	58.5	93
Rhode Island	485	485	-	131	354	52.8	92
South Carolina	1,009	751	258	265	744	37.7	76
South Dakota	306	249	57	76	230	47.0	90
Tennessee	1,739	1,465	274	447	1,292	43.5	81
Texas	5,555	4,650	905	1,625	3,930	50.3	82
Utah	535	516	19	151	384	51.4	90
Vermont	206	180	26	59	147	48.0	93
Virginia	2,190	1,755	435	624	1,567	47.3	85
Washington	1,817	1,416	401	513	1,304	54.7	90
West Virginia	711	622	89	176	535	39.5	78
Wisconsin	2,168	1,592	576	590	1,578	51.2	94
Wyoming	180	169	11	55	125	57.7	89

- Represents zero. NA Not available.

<sup>1</sup> Includes 457,400 service telephones (non-company telephones for which switching service is provided).

<sup>2</sup> Households with service are sum of residence main, apartment house private branch exchange and residence service main telephones, and other residence private branch exchange systems. There tends to be a slight overstatement of the proportion of households with telephone service.

<sup>3</sup> Represents the number of completed local calls and completed and uncompleted toll calls originating from company and service telephones of the Bell companies. Partially estimated.

Source: Federal Communications Commission; annual report, *Statistics of Communications Common Carriers*, and unpublished data. Data from American Telephone and Telegraph Company.

## No. 754. INDEPENDENT TELEPHONE COMPANIES—SUMMARY: 1940 TO 1968

[Money figures in millions of dollars. As of December 31 or calendar year, as applicable. Includes Puerto Rico. Covers only those companies submitting operating information to the United States Independent Telephone Association. Companies reporting in 1968 represented 92 percent of the independent telephones in service. See also *Historical Statistics, Colonial Times to 1957*, series R 28-42]

ITEM	1940	1950	1955	1960	1965	1966	1967	1968
All companies, number.....	6,491	5,542	4,714	3,301	2,423	2,246	2,102	1,972
Reporting companies, number.....	218	379	406	550	669	666	670	654
Telephones (incl. service telephones), 1,000.....	2,194	4,922	6,750	9,718	13,648	14,704	15,552	16,836
Telephone plant in service, book value.....	375	878	1,656	3,396	6,056	6,878	7,621	8,714
Depreciation reserves.....	85	203	326	600	1,168	1,333	1,487	1,706
Operating revenues <sup>1</sup> .....	81	270	503	906	1,530	1,734	1,873	2,152
Operating expenses <sup>2</sup> .....	61	211	354	630	1,040	1,184	1,300	1,477
Net income.....	13	29	67	117	225	257	264	293
Employees.....	1,000.....	(NA)	63	72	85	101	110	123
Wages and salaries.....		(NA)	147	224	359	537	612	782

NA. Not available.

<sup>1</sup> Estimated revenues including nonreporting companies, amounted to \$1,020 million in 1960, \$1,670 million in 1965, \$1,879 million in 1966, \$2,026 million in 1967, and \$2,305 million in 1968. <sup>2</sup> Excludes Federal income taxes.

Source: United States Independent Telephone Association, Washington, D.C.; annual report, *Statistics of the Independent Telephone Industry*. (Copyright.)

No. 755. RURAL ELECTRIFICATION ADMINISTRATION—TELEPHONE PROGRAM,  
SUMMARY OF OPERATIONS: 1950 TO 1969

[Cumulative data cover period from program authorization, October 28, 1949, to December 31 of years shown]

ITEM	1950	1955	1960	1965	1968	1969
Loans approved, cumulative, Dec. 31: <sup>1</sup>						
Borrowers.....	61	415	727	845	867	865
Amount.....	mil. dol.	19	274	737	1,200	1,666
Route miles of line provided for, cumulative, Dec. 31.....	1,000.....	21	179	378	515	559
Subscribers provided for, cumulative, Dec. 31.....	1,000.....	75	607	1,467	2,066	2,317
To receive initial service.....	1,000.....	45	311	673	1,072	1,254
To receive improved service.....	1,000.....	29	296	794	994	1,063
Telephones in service, Dec. 31.....	1,000.....	(NA)	304	1,280	2,046	2,561
Total operating revenues during year.....	mil. dol.	(NA)	16	94	187	272
Total telephone plant.....	mil. dol.	(NA)	(NA)	635	1,168	1,639
Employees.....		(NA)	(NA)	9,672	11,567	13,389

NA. Not available.

<sup>1</sup> Net loans (revisions deducted).

<sup>2</sup> Preliminary.

Source: Dept. of Agriculture, Rural Electrification Administration; *Annual Statistical Report—Rural Telephone Borrowers*.

## No. 756. COMMUNICATIONS RATES BETWEEN SELECTED CITIES: 1945 TO 1970

[See also *Historical Statistics, Colonial Times to 1957*, series R 68-71 and R 86-89]

EFFECTIVE DATE	BETWEEN NEW YORK CITY AND—				EFFECTIVE DATE	BETWEEN NEW YORK CITY AND—			
	Philadelphia	Chicago	Denver	San Francisco		London	Cairo	Tokyo	Buenos Aires
<b>TELEGRAPH RATES<sup>1</sup></b>									
1946, Dec. 29.....	\$0.36	\$0.72	\$1.08	\$1.44	1945, May 1.....	CABLE AND RADIO TELEGRAPH RATES <sup>3</sup>			
1950, Feb. 1.....	.40	.75	1.25	1.45	1945, May 1.....	\$0.20	\$0.42	\$0.24	\$0.20
1955, Aug. 26.....	.95	1.30	1.75	1.75	1950, July 1.....	.19	.30	.30	.27
1960, Oct. 17.....	1.10	1.45	1.90	1.90	1958, Aug. 1.....	.21	.34	.34	.31
1966, Jan. 1.....	1.27	1.70	2.23	2.23	In effect Jan. 1, 1970.....	.23	.34	.34	.31
1968, Nov. 1.....	2.35	2.25	2.25	2.25	TELEPHONE RATES <sup>4</sup>				
In effect Jan. 1, 1970.....	2.35	2.25	2.25	2.25	1945.....	12.00	30.00	19.50	12.00
<b>TWX RATES<sup>2</sup></b>					1946.....	12.00	12.00	12.00	12.00
1946, Feb. 1.....	.35	1.05	1.55	1.75	In effect Jan. 1, 1970.....	12.00	12.00	12.00	12.00
1953, July 1.....	.45	1.20	1.65	1.75					
1960, Feb. 7.....	.45	1.15	1.65	1.75					
In effect Jan. 1, 1970.....	.25	.45	.55	.60					

<sup>1</sup> Beginning Sept. 1, 1951, minimum charge for 15 text words or less; prior to that, for 10 text words or less.

<sup>2</sup> Prior to September 1966, telephone company rates for 3 minutes or less, 2-way; thereafter, for each minute or fraction thereof. Since 1959, the telegraph company has offered similar service called "Telex" with a different rate structure.

<sup>3</sup> Per plain language telegraph-word including address and signature.

<sup>4</sup> For person-to-person, 3-minute call. Station-to-station service available to Tokyo beginning June 18, 1964; to London beginning Feb. 1, 1967; and to Buenos Aires beginning Nov. 1, 1969, with 3-minute initial period rates of \$7.50, \$9.00, and \$9.00, respectively.

Source: Federal Communications Commission; unpublished data.

# Broadcast Stations

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## No. 757. BROADCAST AND OTHER STATIONS AUTHORIZED AND OPERATORS LICENSED, BY CLASS: 1960 AND 1969

[As of June 30. Includes Puerto Rico and Virgin Islands. See also *Historical Statistics, Colonial Times to 1957*, series R 90-94 and R 120-126]

CLASS	1960	1969	CLASS	1960	1969
<b>Safety and special radio services<sup>1</sup></b>			<b>Broadcast services<sup>2</sup></b>	11,179	24,499
Amateur and disaster	651,993	1,769,378	Commercial AM	3,581	4,321
Citizens	228,206	285,175	Commercial TV	653	856
Aviation	126,034	860,624	Educational TV	64	195
Aircraft	91,180	143,997	TV translator	302	2,606
Aeronautical and fixed	72,017	117,185	Auxiliary TV	1,093	2,257
Civil air patrol	3,942	6,050	Experimental TV	24	15
Other	14,432	18,855	Commercial FM	912	2,181
Industrial	789	1,907	Educational FM	181	422
Power	64,804	204,266	International	5	3
Business	12,427	18,080	Remote pickup	4,279	10,957
Petroleum	19,161	123,982	Studio-transmitter-link	65	341
Forest products	8,591	12,023	Instructional TV fixed	-	147
Special industrial	1,876	3,810	Other	20	198
Other	21,901	40,517	<b>Common carrier services</b>	4,386	13,376
Land transportation	848	5,854	Point to point microwave	2,379	6,112
Railroad	11,452	21,291	Local TV transmission	77	71
Taxicab	3,065	7,781	Rural radio	473	728
Interurban property	4,935	5,880	Developmental	51	131
Other	1,861	3,169	Domestic public land mobile <sup>1</sup>	1,350	6,280
Marine	1,591	4,961	Fixed public teleg.-telephone	-	8
Ship	97,411	186,295	International control-fixed	-	7
Alaskan	95,626	182,530	Fixed public telephone	12	7
Coastal and other	1,240	1,615	<b>Experimental services</b>	728	1,019
Public safety	545	2,150	Fixed public telegraph	44	9
Police	32,906	67,730	Satellite earth stations	-	8
Fire	14,039	21,653	Satellites in orbit	-	15
Forestry conservation	5,935	12,453	<b>Community antenna relay service</b>	-	43
Highway maintenance	3,667	5,572	<b>Radio operators</b>	2,154,402	3,515,038
Special emergency	3,582	7,274	Commercial operators	1,947,368	3,282,986
Other	3,994	8,566	Amateur operators	207,034	262,052

<sup>1</sup> Represents zero.

<sup>2</sup> Each license, construction permit, or combination construction permit and license is counted as one station; therefore, a station might include a transmitter and many mobile units.

<sup>2</sup> Stations licensed or holding construction permits.

Source: Federal Communications Commission; *Annual Report*.

## No. 758. COMMERCIAL BROADCAST STATIONS, NUMBER AND REVENUES: 1945 TO 1968

[Includes Puerto Rico and Virgin Islands. Total broadcast revenues are defined as total time sales of all networks and stations, less commissions to agencies and plus incidental revenues, such as sale of talent and program material. See also *Historical Statistics, Colonial Times to 1957*, series R 104-105 and R 114-115]

YEAR	TOTAL		AM AND AM-FM		FM (INDEPENDENTS)		TV	
	Stations (Dec. 31)	Revenues (\$1,000)	Stations (Dec. 31)	Revenues <sup>1</sup> (\$1,000)	Stations (Dec. 31)	Revenues (\$1,000)	Stations (Dec. 31)	Revenues <sup>2</sup> (\$1,000)
1945	912	299,715	901	299,338	5	39	6	338
1950	2,336	550,395	2,143	443,058	86	1,422	107	105,915
1955	3,179	1,198,066	2,704	452,358	38	1,018	437	744,714
1960	4,218	1,866,304	3,470	501,863	218	5,814	530	1,268,627
1964	4,777	2,525,266	3,896	719,186	306	12,800	575	1,793,300
1965	4,867	2,757,289	3,941	776,789	338	15,700	588	1,964,800
1966	5,008	3,075,081	4,019	852,681	381	19,400	608	2,203,000
1967	5,100	3,182,736	4,076	884,736	405	22,600	619	2,275,400
1968	5,236	3,543,855	4,161	994,655	433	28,300	642	2,520,900

<sup>1</sup> Prior to 1960, includes 4 national networks and 3 regional networks; 1961-1967, includes 4 national networks; thereafter, includes 7 national networks (CBS, MBS, NBC and ABC's 3 AM and 1 FM).

<sup>2</sup> Includes 4 networks in 1950 and Jan.-Sept. 15, 1955; 3 networks thereafter.

Source: Federal Communications Commission; annual releases, *AM-FM Broadcast Financial Data* and *TV Broadcast Financial Data*.

## Communications

No. 759. COMMERCIAL BROADCAST STATIONS ON THE AIR—STATES AND OTHER AREAS: JANUARY 1, 1969

STATE OR OTHER AREA	Total	AM	FM	TV	STATE OR OTHER AREA	Total	AM	FM	TV
Total.....	6,791	4,214	1,911	666	Montana.....	54	41	4	9
United States.....	6,710	4,167	1,888	655	Nebraska.....	76	47	15	14
Alabama.....	193	133	45	15	Nevada.....	34	19	8	7
Alaska.....	28	18	3	7	New Hampshire.....	37	25	10	2
Arizona.....	83	58	14	11	New Jersey.....	61	32	25	4
Arkansas.....	117	83	28	6	New Mexico.....	77	54	16	7
California.....	421	230	142	49	New York.....	260	154	89	26
Colorado.....	101	66	24	11	North Carolina.....	278	191	68	19
Connecticut.....	60	37	18	5	North Dakota.....	47	27	9	11
Delaware.....	13	10	3	-	Ohio.....	248	114	105	29
Dist. of Columbia.....	18	6	6	6	Oklahoma.....	104	63	32	9
Florida.....	288	189	75	24	Oregon.....	108	80	16	12
Georgia.....	232	169	50	13	Pennsylvania.....	295	168	105	22
Hawaii.....	39	25	4	10	Rhode Island.....	24	15	7	2
Idaho.....	55	42	6	7	South Carolina.....	144	100	33	11
Illinois.....	231	121	88	22	South Dakota.....	43	28	5	10
Indiana.....	170	83	70	17	Tennessee.....	213	138	60	15
Iowa.....	117	72	33	12	Texas.....	452	283	115	54
Kansas.....	91	57	22	12	Utah.....	44	31	10	3
Kentucky.....	163	99	55	9	Vermont.....	21	18	1	2
Louisiana.....	140	89	36	15	Virginia.....	185	122	51	12
Maine.....	55	36	12	7	Washington.....	146	96	37	13
Maryland.....	88	52	31	5	West Virginia.....	87	58	20	9
Massachusetts.....	110	62	37	11	Wisconsin.....	180	93	70	17
Michigan.....	215	124	72	18	Wyoming.....	33	29	1	3
Minnesota.....	129	82	35	12	Puerto Rico.....	72	43	21	8
Mississippi.....	133	95	29	9	Guam.....	3	1	1	1
Missouri.....	160	103	38	19	Virgin Islands.....	6	3	1	2

- Represents zero.

Source: Federal Communications Commission; annual releases, *AM-FM Broadcast Financial Data* and *TV Broadcast Financial Data*, and unpublished data.

## No. 760. PERCENT OF HOUSEHOLDS WITH TELEVISION SETS: 1955 TO 1969

For composition of regions, see figure I, p. xii; for definition of standard metropolitan statistical areas (SMSA's), see text, p. 2. See *Historical Statistics, Colonial Times to 1957*, series R 98, for number of families with TV.]

ITEM	June 1955 <sup>1</sup>	May 1960	August 1965	June 1967	Janu- ary 1969	PERCENT OF TELEVISION HOUSE- HOLDS HAVING—			
						UHF set <sup>2</sup>		Color set	
						June 1967	January 1969	June 1967	January 1969
All households.....	100	100	100	100	100	(X)	(X)	(X)	(X)
Percent with TV.....	67	88	92	94	95	(X)	(X)	(X)	(X)
Television households, total.....	(X)	(X)	(X)	(X)	(X)	42	55	19	32
By area:									
Inside SMSA's.....	78	91	94	95	96	45	59	21	34
Outside SMSA's.....	50	82	89	92	94	37	47	17	28
By region:									
Northeast.....	80	92	94	95	96	41	55	18	29
North Central.....	72	89	94	95	96	47	58	21	34
South.....	53	82	90	92	94	38	51	16	29
West.....	62	87	92	93	95	43	57	24	40
By number of sets:									
No set.....	33	12	8	6	5	(X)	(X)	(X)	(X)
1 set.....	65	77	73	69	66	35	47	13	22
2 sets or more.....	2	11	20	25	29	61	73	37	54

X Not applicable. <sup>1</sup> Excludes Alaska and Hawaii. <sup>2</sup> Sets equipped for ultrahigh frequency reception.Source: Dept. of Commerce, Bureau of the Census; *Current Housing Reports*, Series H-121.

## No. 761. TELEVISION BROADCAST INDUSTRY FINANCES: 1950 TO 1968

[Money figures in millions of dollars. Includes Puerto Rico and Virgin Islands. See also headnote, table 758.  
See also *Historical Statistics, Colonial Times to 1957*, series R 114-117]

ITEM	1950	1955	1960	1964	1965	1966	1967	1968
Number of networks, Dec. 31.....	4	4	3	3	3	3	3	3
Number of stations reporting, Dec. 31.....	107	437	530	575	588	608	619	642
Broadcast revenues.....	106	745	1,269	1,793	1,965	2,203	2,275	2,521
3 networks (incl. owned and operated stations) <sup>1</sup> .....	56	374	641	929	1,024	1,166	1,217	1,308
Other stations.....	50	371	628	865	941	1,037	1,059	1,213
Broadcast expenses of networks and stations.....	115	595	1,025	1,378	1,517	1,710	1,861	2,026
3 networks (incl. owned and operated stations) <sup>1</sup> .....	66	306	546	772	862	980	1,057	1,129
Other stations.....	50	289	479	606	655	731	804	897
Broadcast income before Federal income tax.....	29	150	244	416	448	493	415	495
3 networks (incl. owned and operated stations) <sup>1</sup> .....	20	68	95	157	162	187	160	179
Other stations.....	1	82	149	259	286	306	255	318
BROADCAST REVENUES								
Revenues from time sales, net.....	76	572	952	1,286	1,394	1,521	1,533	1,732
Commissions to regularly established agencies, representatives, brokers, and others.....	14	109	195	264	280	314	314	356
Revenues from time sales.....	91	681	1,147	1,550	1,674	1,835	1,847	2,088
Revenues from network time sales.....	35	309	472	563	585	617	610	637
Revenues from non-network time sales to— National and regional advertisers and sponsors.....	25	222	459	711	786	872	872	998
Local advertisers and sponsors.....	30	150	216	276	303	346	346	453
Revenues from incidental broadcast activities.....	30	172	317	507	571	683	742	789
Talent and programs.....	15	113	234	422	484	593	647	678
Sundry broadcast revenues.....	14	60	82	85	87	89	95	111

<sup>1</sup> 4 networks prior to Sept. 15, 1955, when DuMont ceased network operations.

<sup>2</sup> Loss.

Source: Federal Communications Commission; annual release, *TV Broadcast Financial Data*.

## No. 762. TELEVISION STATIONS—MULTIPLE OWNERSHIP AND NEWSPAPER AFFILIATION: 1968

[Revenue in millions of dollars. As of Dec. 31. Covers all TV stations in operation during 1968, including satellites.  
"Multiply owned" stations are those licensed to owner of more than 1 TV station; "newspaper affiliated," those licensed to a newspaper or newspaper affiliated company. Markets ranked by size of market revenue]

TYPE OF STATION	ALL MARKETS		TOP 10 MARKETS		TOP 25 MARKETS		TOP 50 MARKETS	
	Stations	Revenue	Stations	Revenue	Stations	Revenue	Stations	Revenue
All stations.....	666	1,504	67	605	128	879	218	1,116
Multiply owned.....	349	1,174	50	547	94	762	156	950
Percent of total.....	52.4	78.1	74.6	90.4	73.4	86.7	71.6	85.1
Newspaper affiliated.....	108	285	13	84	26	148	40	195
Non-newspaper affiliated.....	241	889	37	464	68	615	116	755
Singly owned.....	317	330	17	58	34	117	62	166
Percent of total.....	47.6	21.9	25.4	9.6	26.6	13.3	28.4	14.9
Newspaper affiliated.....	52	133	6	53	12	86	15	96
Non-newspaper affiliated.....	265	197	11	5	22	31	47	70
Network affiliated stations.....	561	1,325	30	461	76	718	149	941
Multiply owned.....	303	1,015	24	407	60	611	115	792
Newspaper affiliated.....	95	230	4	35	14	94	27	140
Non-newspaper affiliated.....	208	785	20	373	46	518	88	652
Singly owned.....	238	310	6	53	16	106	34	149
Newspaper affiliated.....	48	131	6	53	11	84	14	94
Non-newspaper affiliated.....	210	179	—	—	5	22	20	55
Independent stations.....	105	179	37	145	52	162	69	175
Multiply owned.....	46	159	26	140	34	151	41	158
Newspaper affiliated.....	13	55	9	49	12	54	13	55
Non-newspaper affiliated.....	33	104	17	91	22	97	28	103
Singly owned.....	59	20	11	5	18	11	28	17
Newspaper affiliated.....	4	2	—	—	1	2	1	2
Non-newspaper affiliated.....	55	18	11	5	17	9	27	15

- Represents zero.

Source: Federal Communications Commission; annual release, *TV Broadcast Financial Data*.

## No. 763. RADIO BROADCAST INDUSTRY FINANCES: 1950 TO 1968

[Money figures in millions of dollars. Includes Puerto Rico and Virgin Islands. Excludes FM (independents). See also headnote, table 753. See *Historical Statistics, Colonial Times to 1957*, series R 103-107, for data including FM (independents).]

ITEM	1950	1955	1960	1965	1966	1967	1968
Number of networks, Dec. 31.....	7	7	4	4	4	4	7
Number of stations reporting, Dec. 31.....	2,143	2,704	3,470	4,004	4,019	4,076	4,161
Broadcast revenues.....	443	452	592	777	853	885	965
7 networks (incl. owned and operated stations) <sup>1</sup> .....	111	78	63	74	79	77	81
Other stations.....	333	374	529	702	773	808	914
Broadcast expenses of networks and stations.....	372	406	544	696	752	800	877
7 networks (incl. owned and operated stations) <sup>1</sup> .....	92	72	66	71	76	79	86
Other stations.....	281	334	478	624	676	721	791
Broadcast income before Federal income tax.....	71	46	48	81	101	85	117
7 networks (incl. owned and operated stations) <sup>1</sup> .....	19	6	-3	3	4	-2	-5
Other stations.....	52	40	51	78	97	87	122
BROADCAST REVENUES							
Revenues from time sales, net.....	401	411	556	740	813	845	958
Commissions to regularly established agencies, representatives, brokers and others.....	53	48	67	88	99	102	118
Revenues from time sales.....	454	457	622	828	912	947	1,076
Revenues from network time sales.....	132	64	35	45	47	48	47
Revenues from non-network time sales to:							
National and regional advertisers and sponsors.....	119	120	202	254	285	290	332
Local advertisers and sponsors.....	203	272	385	529	580	609	697
Revenues from incidental broadcast activities.....	42	41	36	37	39	40	37
Talent.....	25	27	23	22	22	22	19
Sundry broadcast revenues.....	17	15	13	16	17	18	18

<sup>1</sup> For 1950 and 1955, 7 networks (4 national and 3 regional); 1960 through 1967, 4 national networks; thereafter, 7 national networks (CBS, MBS, NBC, and ABC's 3 AM and 1 FM).

Source: Federal Communications Commission; annual release, *AM-FM Broadcast Financial Data*.

## No. 764. NEWSPRINT CONSUMPTION, NEWSPAPER PAGES, AND CIRCULATION: 1945 TO 1969

[Prior to 1960, excludes Alaska and Hawaii]

YEAR	NEWSPRINT CONSUMPTION (1,000 short tons)					NEWSPAPER PAGES PER ISSUE <sup>3</sup>		NEWSPAPER CIRCULATION PER FAMILY	
	Total <sup>1</sup>	By newspapers <sup>2</sup>				Daily	Sunday	Daily	Sunday
		Total	Advertising		Other content				
		Amount	Percent	Amount	Percent				
1945.....	3,451	3,237	1,667	51.5	1,570	48.5	22	70	1.28
1950.....	5,863	5,521	3,279	59.4	2,242	40.6	36	112	1.23
1955.....	6,484	6,173	3,827	62.0	2,346	38.0	40	132	1.16
1960.....	7,312	6,800	4,148	61.0	2,652	39.0	43	142	1.12
1965.....	8,442	7,851	4,750	60.5	3,101	39.5	50	167	1.05
1966.....	9,098	8,462	5,221	61.7	3,241	38.3	53	180	1.06
1967.....	9,159	8,518	5,213	61.2	3,305	38.8	53	178	1.05
1968.....	9,162	8,521	5,274	61.9	3,247	38.1	55	186	1.03
1969 (prel.).....	9,741	9,050	5,617	62.0	3,442	38.0	56	191	1.00

<sup>1</sup> Apparent consumption; equals production plus imports minus exports adjusted for year-end change in newspaper publishers' inventories and domestic mill stocks.

<sup>2</sup> Based on information of Media Records, Inc.

<sup>3</sup> Based on information of Newsprint Division, American Paper Institute, average in 39 cities.

Source: Dept. of Commerce, Business and Defense Services Administration; unpublished data.

# Newspapers

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## No. 765. DAILY AND SUNDAY NEWSPAPERS—NUMBER AND CIRCULATION, 1940 TO 1969, AND BY STATES, 1969

**Circulation in thousands.** As of October 1, except number of newspapers, beginning 1965, as of January 1 of following year. Prior to 1960, excludes Alaska and Hawaii. For English language newspapers only. See also *Historical Statistics, Colonial Times to 1957*, series R 169-172]

YEAR AND STATE	DAILY NEWSPAPERS						SUNDAY NEWSPAPERS	
	Total		Morning		Evening		Number	Net paid circulation
	Number	Net paid circulation	Number	Net paid circulation	Number	Net paid circulation		
1940.....	1,878	41,132	380	16,114	1,498	25,018	525	32,371
1945.....	1,749	48,384	330	19,240	1,419	29,144	485	39,860
1950.....	1,772	53,829	322	21,266	1,450	32,563	549	46,582
1955.....	1,760	56,147	316	22,183	1,454	33,964	541	46,448
1960.....	11,763	58,882	312	24,029	1,459	34,853	563	47,699
1965.....	11,751	60,358	320	24,107	1,444	36,251	562	48,600
1966.....	11,754	61,397	324	24,806	1,444	36,592	578	49,282
1967.....	11,749	61,561	327	25,282	1,438	36,279	573	49,224
1968.....	11,752	62,535	328	25,838	1,443	36,697	578	49,693
1969								
United States <sup>2</sup> .....	1,758	62,060	333	25,812	1,443	36,248	585	49,675
Alabama.....	20	703	6	308	14	395	14	616
Alaska.....	6	68	1	11	5	56	2	19
Arizona.....	13	424	3	214	10	209	5	351
Arkansas.....	235	427	5	164	31	263	11	369
California.....	134	5,814	22	2,411	112	3,404	39	4,833
Colorado.....	26	698	3	249	23	449	9	733
Connecticut.....	28	951	6	283	22	668	7	607
Delaware.....	3	156	1	45	2	111	-	-
District of Columbia.....	3	1,000	1	486	2	514	2	982
Florida.....	49	1,987	16	1,258	33	729	30	1,842
Georgia.....	31	973	6	399	25	574	12	912
Hawaii.....	5	228	1	72	4	156	2	180
Idaho.....	115	173	5	66	12	106	5	139
Illinois.....	193	3,959	20	1,954	74	2,005	19	2,921
Indiana.....	183	1,703	9	461	75	1,243	20	1,188
Iowa.....	143	1,004	5	385	40	669	9	876
Kansas.....	150	650	5	231	46	419	14	437
Kentucky.....	127	762	5	317	23	445	13	568
Louisiana.....	23	764	4	375	19	389	10	674
Maine.....	9	269	5	207	4	62	1	111
Maryland.....	12	752	4	220	8	531	4	723
Massachusetts.....	46	2,345	6	1,207	40	1,139	8	1,609
Michigan.....	55	2,415	1	562	54	1,853	12	2,080
Minnesota.....	231	1,136	5	417	27	719	7	1,018
Mississippi.....	20	315	4	91	16	224	7	188
Missouri.....	54	1,782	8	740	46	1,041	14	1,511
Montana.....	15	189	4	98	11	92	9	180
Nebraska.....	19	481	3	163	16	319	5	363
Nevada.....	7	143	2	54	5	89	4	130
New Hampshire.....	19	160	1	31	9	129	1	52
New Jersey.....	131	1,753	7	508	24	1,245	8	1,273
New Mexico.....	19	208	1	64	18	143	12	177
New York.....	180	7,625	21	4,377	60	3,248	15	6,486
North Carolina.....	48	1,261	9	597	39	664	18	907
North Dakota.....	1210	185	3	45	8	139	3	102
Ohio.....	296	3,522	8	926	88	2,597	20	2,326
Oklahoma.....	52	846	9	420	43	427	41	790
Oregon.....	21	654	3	285	18	370	5	530
Pennsylvania.....	1109	4,037	28	1,288	85	2,769	10	2,844
Rhode Island.....	7	319	1	67	6	252	2	216
South Carolina.....	17	557	8	391	9	166	7	437
South Dakota.....	12	171	1	3	11	167	4	121
Tennessee.....	233	1,148	7	461	26	687	14	917
Texas.....	2112	3,198	23	1,466	87	1,731	83	3,115
Utah.....	5	256	1	106	4	149	4	252
Vermont.....	9	113	2	66	7	47	-	-
Virginia.....	232	1,003	10	463	22	539	13	716
Washington.....	123	1,046	5	312	19	733	12	962
West Virginia.....	31	493	9	232	22	261	9	361
Wisconsin.....	38	1,221	4	276	34	946	7	852
Wyoming.....	9	73	6	51	3	22	3	47

<sup>1</sup> Represents zero. <sup>2</sup> Adjusted to account for all-day papers listed in morning and evening figures (circulations divided between them).

<sup>2</sup> Adjusted to allow for duplication of Texarkana, Ark.-Tex., Bristol, Tenn.-Va., and Fargo, N. Dak.-Moore-head, Minn., papers in individual State tabulations (circulations divided between States); for Covington, Ky., papers also included in Ohio.

Source: Editor & Publisher Company, New York, N.Y.; *Editor & Publisher Year Book—1970*. (Copyright.)

## No. 766. NEWSPAPERS AND PERIODICALS: 1940 TO 1970

[Prior to 1960, excludes Alaska and Hawaii. Data refer to year of compilation of the Directory cited as the source, i.e., generally to year preceding year shown.]

FREQUENCY OF PUBLICATION	1940	1950	1955	1960	1965	1968	1969	1970
Newspapers.....	13,314	12,115	11,415	11,315	11,383	11,293	11,336	11,383
Semiweekly.....	368	337	324	324	357	387	413	423
Weekly.....	10,860	9,794	9,126	8,979	8,989	8,858	8,855	8,903
Daily.....	2,015	1,894	1,860	1,854	1,843	1,838	1,833	1,838
Other.....	71	90	105	158	194	215	235	219
Periodicals.....	6,432	6,960	7,648	8,422	8,990	9,400	9,434	9,573
Weekly.....	1,399	1,443	1,602	1,580	1,716	1,798	1,787	1,856
Semimonthly <sup>1</sup> .....	427	416	503	527	550	606	587	589
Monthly.....	3,466	3,694	3,782	4,113	4,195	4,331	4,353	4,314
Bimonthly.....	241	436	608	743	876	899	957	957
Quarterly.....	538	604	674	895	1,030	1,078	1,084	1,108
Other.....	361	367	479	564	623	690	724	749

<sup>1</sup> Includes fortnightly prior to 1968.

Source: N. W. Ayer and Son, Inc., Philadelphia, Pa.; annual release, *Ayer Directory of Newspapers, Magazines and Trade Publications*. (Copyright.)

## No. 767. NEWSPAPERS AND PERIODICALS—CIRCULATION AND RECEIPTS: 1958, 1963, AND 1967

[Circulation in thousands; receipts in millions of dollars. See also *Historical Statistics, Colonial Times to 1957*, series R 173-186]

TYPE OF PUBLICATION	1958		1963		1967	
	Circula- tion per issue <sup>1</sup>	Receipts		Circula- tion per issue <sup>1</sup>	Receipts	
		Total	Adver- tising		Total	Adver- tising
Newspapers, total <sup>2</sup> .....	(X)	3,458	2,444	(X)	4,255	3,024
Laily and Sunday.....	(X)	3,125	2,208	(X)	3,792	2,728
Morning <sup>4</sup> .....	1,908	88	55	2,602	124	81
Evening <sup>4</sup> .....	18,225	561	410	13,971	681	500
Morning and Sunday <sup>1</sup> .....	29,523	724	497	31,663	891	628
Evening and Sunday.....	26,489	705	500	32,424	940	673
Morning and evening <sup>4</sup> .....	619	30	21	717	37	27
Morning, evening, and Sunday.....	35,227	1,016	725	34,002	1,119	819
Weekly and other.....	(X)	298	235	(X)	379	296
Weekly <sup>4</sup> .....	29,828	248	195	(?)	288	219
Other <sup>3</sup> .....	3,651	50	41	(?)	91	77
Not specified.....	(X)	35	(NA)	(X)	84	(NA)
Periodicals, total.....	408,364	1,639	1,018	(X)	2,036	1,242
Farm.....	18,850	67	55	14,305	54	46
General.....	14,872	48	40	12,087	43	37
Specialized.....	3,978	19	16	2,218	11	9
Specialized.....	51,577	380	294	(X)	535	413
Industrial, engineering, technical.....	11,399	212	182	12,113	247	217
Merchandising.....	4,686	72	66	(S)	127	106
Professional, institutional, service.....	35,492	96	47	(S)	121	65
Not specified.....	(X)	(X)	(X)	(S)	40	25
General.....	241,741	887	544	(X)	1,167	711
Comics.....	63,035	22	1	27,594	11	1
Women and home services.....	70,729	207	133	72,573	316	204
General entertainment.....	98,378	530	319	102,501	659	380
General news.....	7,780	101	73	7,375	141	106
Business news.....	1,819	26	18	(S)	28	15
Not specified.....	(X)	(X)	(X)	(X)	12	5
Other.....	96,196	265	123	141,943	230	73
Not specified.....	(X)	40	(NA)	(X)	49	(NA)

NA Not available. S Does not meet publication standards.

X Not applicable. Z Less than \$500,000.

<sup>1</sup> Includes paid, free bulk, etc. "Issue" defined as the sum of all editions published on a given day. Figures are totals of average circulation per issue.

<sup>2</sup> Includes foreign language newspapers. <sup>3</sup> Includes amounts not specified by kind.

<sup>4</sup> No Sunday editions. <sup>5</sup> Establishments with less than 10 employees were not required to file reports specifying source of receipts. Thus a substantial portion of "Not specified" is included in "Weekly and other."

<sup>6</sup> Includes those issued on Sunday only. <sup>7</sup> Not shown because not reported by many small newspapers.

<sup>8</sup> Includes newspapers issued more than one but less than 4 times a week, and those issued less frequently than once a week. <sup>9</sup> Partially estimated.

Source: Dept. of Commerce, Bureau of the Census; 1967 Census of Manufactures, preliminary reports, MC67(P)-27A-1 and MC67(P)-27A-2.

# Books and Pamphlets

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## No. 768. BOOKS AND PAMPHLETS—QUANTITY SOLD AND VALUE OF RECEIPTS: 1958, 1963, AND 1967

[Includes number of copies sold and dollar receipts reported by establishments classified in the "Books, publishing and printing" industry and by establishments reporting these receipts as "secondary" activities in other industries]

TYPE OF PUBLICATION	1958		1963		1967	
	Copies sold (mil.)	Receipts (mil. dol.)	Copies sold (mil.)	Receipts (mil. dol.)	Copies sold (mil.)	Receipts (mil. dol.)
Total.....	(X)	1,010.7	(X)	1,547.8	(X)	2,125.1
All books.....						
Textbooks.....						
Elementary, grades 1-8:						
Hardbound.....	47.5	76.6	54.9	112.7	85.1	180.6
Paperbound.....	26.8	11.6	38.5	21.7	30.0	24.3
High school grades 9-12:						
Hardbound.....	23.1	58.2	329.9	97.8	37.0	125.0
Paperbound.....	2.5	2.0	9.4	8.8	11.6	14.9
College, grades 13 and over: <sup>2</sup>						
Hardbound.....	19.6	81.4	24.2	131.7	41.6	228.9
Paperbound.....	3.1	2.8	9.3	14.9	16.7	32.7
Workbooks, paperbound.....	76.6	40.3	106.3	61.1	132.9	93.9
Standardized tests, paperbound <sup>3</sup> .....	97.0	8.7	137.3	19.3	188.0	28.5
Subscription reference books, hardbound <sup>4</sup> .....	44.9	163.6	35.7	207.3	31.3	190.8
Technical, scientific, and professional books.....						
Law, designed for the profession.....	(X)	116.0	(X)	1 156.3	(X)	1 237.1
Medical, designed for the profession <sup>5</sup> .....	3.7	36.4	6.5	57.4	8.4	74.1
Business, nonfiction, for adults.....	2.4	21.4	4.1	24.1	5.1	38.4
Other.....	2.1	9.4	1.2	5.6	3.7	19.8
Religious books.....						
Hardbound and paperbound:						
Bibles, complete editions.....	8.9	18.3	{ } 15.3	26.4	10.2	35.8
Testaments.....	10.2	4.7		8.2	7.8	15.4
Hymnals and devotionals <sup>6</sup> .....	5.1	8.1	4.7			
Other, fiction or nonfiction: <sup>7</sup>						
Hardbound.....	9.8	16.0	16.9	31.3	13.6	28.9
Paperbound.....	36.8	11.5	22.5	12.6	23.2	15.2
General books, trade, etc.....						
Book club books, hardbound and paperbound.....	(X)	274.7	(X)	1 458.2	(X)	1 591.7
Wholesale paperbound books, digest size <sup>8</sup> .....	65.2	95.7	75.7	143.4	113.8	155.8
Adult trade books, fiction or nonfiction: <sup>9</sup>						
Hardbound.....	232.6	47.7	241.4	60.5	201.1	67.7
Paperbound.....	32.3	64.7	40.2	108.5	48.4	136.5
Juvenile, fiction and nonfiction: <sup>10</sup>						
\$1.00 and over retail.....	5.7	5.4	48.9	34.5	144.1	80.2
Under \$1.00 retail.....	34.3	40.2	55.1	72.7	62.1	102.4
Other books:						
Hardbound.....	137.8	21.1	120.5	31.3	144.3	35.1
Pamphlets.....						
Religious.....						
Other.....						
Books and pamphlets, not specified by kind.....	(X)	20.2	(X)	25.5	(X)	97.0

S Does not meet publication standards. X Not applicable.

<sup>1</sup> Includes receipts not specified by kind, as follows (in millions of dollars): Textbooks, 1963, 3.1; 1967, 14.7; technical, scientific and professional, 1963, 6.2; 1967, 11.6; religious, 1963, 2.6; 1967, 12.0; general, 1963, 7.3; 1967, 14.0.

<sup>2</sup> Includes private business and secretarial school, post high vocational schools, and institutes and training courses of college grade.

<sup>3</sup> Objective tests, manuals, etc.; includes answer sheets.

<sup>4</sup> Represents books sold direct to the consumer through agents or distributors, usually on installment plan of payment. Includes multivolume encyclopedias, children's literature, biblical sets, etc. Copies sold represent number of volumes rather than sets. <sup>6</sup> Includes nursing and dental subjects.

<sup>5</sup> Includes missals and prayer books.

<sup>7</sup> For adults and juveniles.

<sup>8</sup> Digest size 4 $\frac{1}{4}$ " x 6 $\frac{1}{2}$ "; distributed 75 percent or more through magazine wholesalers in 1963, and 50 percent or more in 1967.

<sup>9</sup> Sold primarily through booksellers or book dealers (retail and wholesale) at trade discounts. Juvenile books represent hardbound and paperbound books, excluding toy books. <sup>10</sup> Includes music.

Source: Dept. of Commerce, Bureau of the Census: U.S. Census of Manufactures: 1963, Vol. II, part 1, and 1967 Census of Manufactures, preliminary report, MC67(P)-27A-3.

## No. 769. NEW BOOKS AND NEW EDITIONS PUBLISHED, BY SUBJECT: 1950 TO 1969

[Comprises new books (those published for the first time) and new editions (those published with changes in text or format). Excludes State and Federal publications; subscription books, except encyclopedias; dissertations; second, third, or fourth printings or impressions; periodicals and quarterlies; and pamphlets of under 49 pages. Beginning 1965, data not strictly comparable with earlier years because of internal shifts in classifications. See also *Historical Statistics, Colonial Times to 1957*, series R 165-167.]

SUBJECT	1950	1955	1960	1965			1969		
				Total	New books	New editions	Total	New books	New editions
<b>Total</b> .....	<b>11,022</b>	<b>12,589</b>	<b>15,012</b>	<b>28,595</b>	<b>20,234</b>	<b>8,361</b>	<b>29,579</b>	<b>21,787</b>	<b>7,792</b>
Agriculture.....	152	168	156	270	214	56	260	216	44
Art.....	357	347	470	971	763	208	1,062	856	206
Biography.....	603	833	879	685	455	230	1,161	718	443
Business.....	250	312	305	537	437	100	683	566	117
Education.....	256	274	348	954	789	165	842	721	121
Fiction.....	1,907	2,073	2,440	3,241	1,615	1,626	2,717	1,816	901
General works.....	345	387	282	634	384	250	724	508	216
History.....	516	665	865	1,682	909	773	1,921	1,191	730
Home economics.....	193	255	197	300	241	59	314	267	47
Juvenile.....	1,059	1,485	1,725	2,895	2,473	422	1,406	1,321	85
Language.....	148	168	228	327	385	142	468	355	113
Law.....	298	305	394	436	291	145	525	363	162
Literature.....	591	660	736	1,686	1,166	520	2,428	1,348	1,080
Medicine.....	443	534	520	1,218	871	347	1,190	928	262
Music.....	113	103	98	300	183	117	351	227	124
Philosophy, psychology.....	340	314	480	979	582	397	951	678	273
Poetry, drama.....	531	493	492	994	775	219	1,254	944	310
Religion.....	727	849	1,104	1,855	1,428	427	1,589	1,278	311
Science.....	705	801	1,089	2,562	1,850	712	2,353	1,999	354
Sociology, economics.....	515	520	754	3,242	2,372	870	4,462	3,216	1,246
Sports, recreation.....	188	200	286	591	474	117	734	585	149
Technology.....	497	477	698	1,153	942	211	1,035	884	151
Travel.....	288	366	466	883	635	248	1,149	802	347

Source: R. R. Bowker Co., New York, N.Y.; *Publishers' Weekly*. (Copyright, by Xerox Corporation.)

## No. 770. BOOKS AND PERIODICALS—AVERAGE RETAIL PRICES, BY SUBJECT: 1960, 1965, AND 1969

SUBJECT	AVERAGE PRICES OF BOOKS <sup>1</sup>			SUBJECT	AVERAGE PRICES OF PERIODICALS <sup>2</sup>		
	1960	1965	1969		1960	1965	1969
<b>Total</b> .....	<b>\$5.24</b>	<b>\$7.65</b>	<b>\$9.37</b>	<b>Total</b> .....	<b>\$5.32</b>	<b>\$6.95</b>	<b>\$9.31</b>
Agriculture.....	(NA)	8.04	8.97	Agriculture.....	2.84	3.83	4.97
Art.....	12.61	10.60	12.65	Business and economics.....	5.34	6.39	8.07
Biography.....	4.98	7.65	10.63	Chemistry and physics.....	11.30	18.42	26.60
Business.....	6.83	9.68	10.47	Children's periodicals.....	2.06	2.61	2.65
Children's books.....	2.74	3.11	3.85	Education.....	4.19	5.14	6.79
Economics.....	6.19	8.43	9.65	Engineering.....	5.86	7.70	10.98
Education.....	4.97	5.79	6.99	Fine and applied arts.....	4.94	5.92	6.97
History.....	5.91	8.83	10.64	History.....	4.60	5.30	6.34
Law.....	8.01	10.64	13.39	Home economics.....	4.43	5.37	6.84
Literature, general.....	3.59	6.90	8.67	Industrial arts.....	4.60	6.55	7.13
Literature, fiction.....	3.59	4.34	5.14	Journalism, communications.....	4.08	5.32	6.00
Literature, poetry.....	3.31	3.92	7.26	Labor and industrial relations.....	2.26	2.66	3.16
Literature, drama.....	4.48	5.47	9.13	Law.....	5.81	7.49	9.31
Medicine.....	8.41	11.88	13.89	Library science.....	3.71	5.15	6.85
Music.....	5.56	8.04	9.03	Literature and languages.....	4.05	4.65	5.74
Religion.....	4.05	6.72	6.75	Mathematics, botany, geology, and general science.....	7.27	10.96	16.71
Science.....	10.21	12.13	11.96	Medicine.....	10.28	14.02	20.77
Sports.....	4.80	6.58	7.45	Philosophy and religion.....	4.05	4.64	5.49
Technology.....	8.89	12.30	13.37	Physical education and recreation.....	3.47	4.26	5.16

NA Not available. <sup>1</sup> Excludes paperbound books, government documents, and encyclopedias. Refers to books published in year stated. <sup>2</sup> Average annual subscription prices.

Source: 1960, Dept. of Health, Education, and Welfare, Office of Education; *The Cost of Library Materials; Price Trends of Publications*, Circular OE-15029A. Beginning 1965, average prices of books, R. R. Bowker Co., New York, N.Y. *Publishers' Weekly* and average prices of periodicals, American Library Association, *Library Journal* (Copyright, by Xerox Corporation.)

# Books—Copyrights

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## No. 771. BOOKS—IMPORTS AND TRANSLATIONS INTO ENGLISH: 1965 AND 1969

[Imports cover all books printed abroad and distributed in U.S. on exclusive basis. See also headnote, table 769]

SUBJECT	IMPORTS						LANGUAGE	TRANSLATIONS		
	1965			1969				1965	1969	
	Total	New books	New editions	Total	New books	New editions				
Total.....	4,670	4,042	628	4,103	3,587	516	Total.....	1,749	1,084	
Agriculture.....	80	74	6	56	49	7	French.....	404	281	
Art.....	327	300	27	324	294	30	German.....	335	243	
Biography.....	145	116	29	123	107	16	Italian.....	53	33	
Business.....	42	39	3	118	111	7	Oriental.....	59	31	
Education.....	60	56	4	88	74	14	Russian.....	256	156	
Fiction.....	103	58	45	46	34	12	Scandinavian.....	51	46	
General works.....	78	69	9	89	76	13	Spanish.....	53	34	
History.....	299	243	56	218	172	46	Other.....	533	280	
Home economics.....	50	45	5	19	18	1				
Juvenile.....	176	162	14	68	67	1				
Language.....	104	84	20	95	80	15				
Law.....	62	53	9	75	66	9				
Literature.....	284	231	53	217	188	29				
Medicine.....	313	274	39	265	213	52				
Music.....	48	38	10	53	45	8				
Philosophy, psychology.....	97	85	12	119	106	13				
Poetry, drama.....	188	162	26	151	132	19				
Religion.....	233	205	28	144	126	18				
Science.....	669	610	59	557	503	54				
Sociology, economics.....	598	517	81	688	610	78				
Sports, recreation.....	115	107	8	113	109	4				
Technical books.....	317	286	31	238	208	30				
Travel.....	282	228	54	239	199	40				

Source: R. R. Bowker Co., New York, N.Y.; *Publishers' Weekly*, Feb. 9, 1970. (Copyright, by Xerox Corporation.)

## No. 772. REGISTRATION OF COPYRIGHTS, BY SUBJECT MATTER: 1950 TO 1969

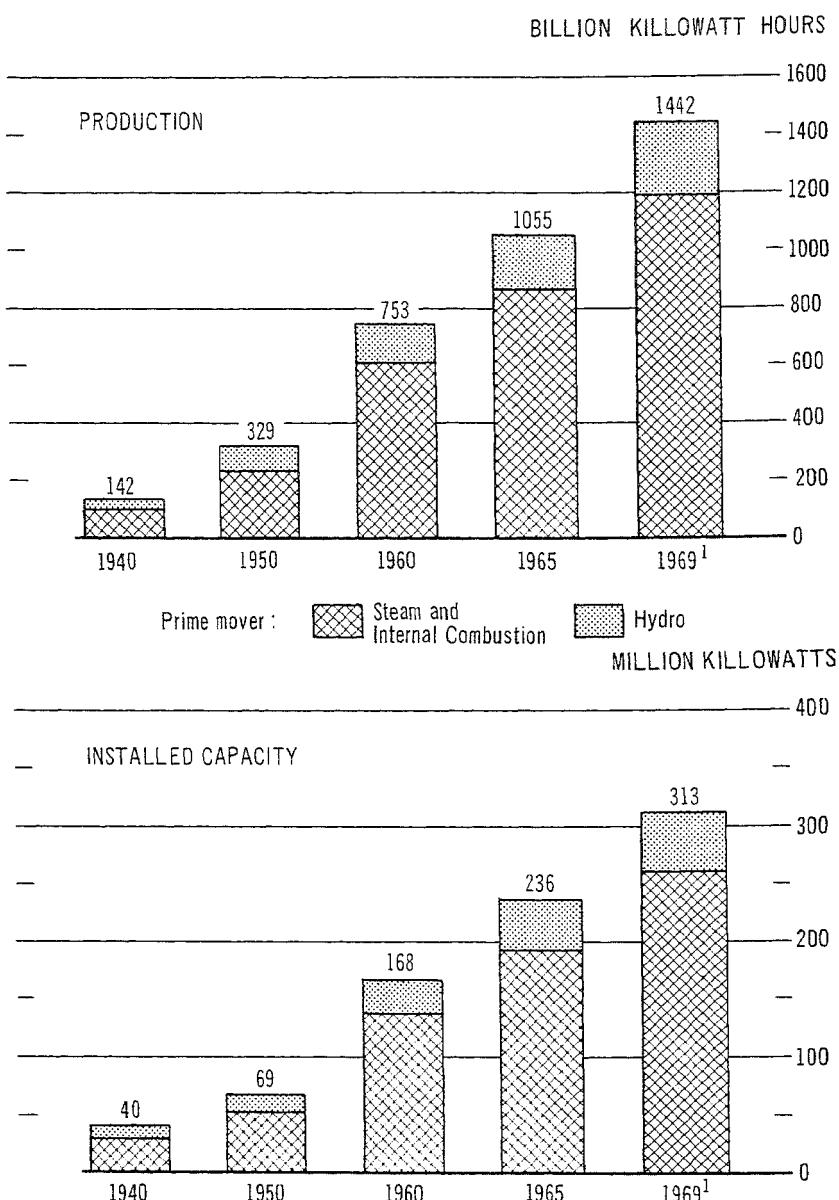
[For years ending June 30. Comprises copyrights issued to citizens of the United States and residents of foreign countries. For information on patents, see table 791. See also *Historical Statistics, Colonial Times to 1957*, series W 52-65]

SUBJECT MATTER OF COPYRIGHT	1950	1955	1960	1965	1968	1969
Total.....	210,564	224,732	243,926	293,617	303,451	301,258
Books (incl. pamphlets, leaflets, etc.).....	50,456	54,414	60,034	76,098	85,189	83,603
Periodicals (issues).....	55,436	59,448	64,204	78,307	81,773	80,706
Contributions to newspapers and periodicals.....	4,438	3,746	3,306	2,095	2,026	1,676
Lectures, sermons, addresses.....	1,007	813	835	848	1,050	1,155
Dramatic or dramatico-musical compositions.....	4,427	3,493	2,445	3,343	3,214	3,213
Musical compositions.....	52,309	57,527	65,558	80,881	80,479	83,608
Maps.....	1,638	2,013	1,812	3,262	2,560	2,024
Works of art, models, or designs.....	4,013	3,456	5,271	5,735	5,286	5,680
Reproductions of works of art.....	326	900	2,516	3,241	2,755	2,489
Drawings or plastic works of a scientific or technical character.....	1,316	1,350	768	1,239	628	552
Photographs.....	1,143	1,105	842	880	734	936
Prints and pictorial illustrations.....	4,309	3,793	3,843	2,927	3,109	2,837
Commercial prints and labels.....	13,320	10,505	8,142	7,509	5,972	4,798
Motion picture photoplays.....	782	1,216	2,755	2,536	1,450	1,066
Motion pictures not photoplays.....	1,113	1,434	702	1,216	1,472	1,298
Renewals of all classes.....	14,531	19,519	21,393	23,520	25,774	25,667

Source: The Library of Congress; *Annual Report*.

FIG. XXXII. ELECTRIC ENERGY PRODUCTION AND INSTALLED CAPACITY OF ELECTRIC UTILITY GENERATING PLANTS: 1940 TO 1969<sup>1</sup>

[See table 776]



<sup>1</sup> Preliminary.

## Section 19

### Power

This section presents statistics on various aspects of power and energy. The principal sources are the Federal Power Commission and the American Gas Association, Inc.

The Federal Power Commission, in its *Annual Report* and in periodic publications and surveys, issues information on the electric power and natural gas industries. Among annual reports are *Statistics of Privately Owned Electric Utilities in the United States*; *Statistics of Publicly Owned Electric Utilities in the United States*; *Sales of Firm Electric Power for Resale*; *Steam-Electric Plant Construction Cost and Annual Production Expenses*; *Hydroelectric Plant Construction Cost and Annual Production Expenses*; *Statistics for Interstate Natural Gas Pipeline Companies*; *Sales by Producers of Natural Gas to Natural Gas Pipeline Companies*; and *World Power Data*. Monthly reports include *Electric Power Statistics* and *Statistics of Major Interstate Natural Gas Pipeline Companies*. The principal survey is the *National Power Survey, 1964*. These various publications contain national and State data on production of electricity, capacity of generating plants, fuels used in energy production, energy sales and consumption, hydroelectric power, construction costs and production expenses of power plants, and depreciation practices of electric and interstate gas pipeline utilities.

The Commission also issues data on electric utility charges in its annual *All-Electric Homes and Typical Electric Bills*; projections for the future in its periodic *Electric Power Requirements and Supply of the United States, by Regions, Present and Future*; and maps showing principal natural gas pipelines and electric facilities.

The American Gas Association, Inc., in its monthly and quarterly bulletins and its yearbook, *Gas Facts*, presents data on gas utilities, including sales, revenues, customers, prices, and other financial and operating statistics. Other sources include the Bureau of Mines' *Minerals Yearbook*, containing data on coal, oil, and natural gas production and utilization; and the Edison Electric Institute's monthly and annual *Statistical Bulletin*, containing data on the distribution of electric energy by public utilities.

**Historical statistics.**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1957*. See preface.

#### No. 773. TOTAL HORSEPOWER OF ALL PRIME MOVERS: 1940 TO 1969

[In millions. As of January, except as noted. Prior to 1960, excludes Alaska and Hawaii, except as noted. Prime movers are mechanical engines and turbines, and work animals, which originally convert fuels or force (as wind or falling water) into work and power. Electric motors, which obtain their power from prime movers, are excluded to avoid duplication. See also *Historical Statistics, Colonial Times to 1957*, series S 1-14.]

ITEM	1940	1950	1955	1960	1965	1968	1969 (prel.)
Total horsepower.....	2,773	4,868	7,153	11,008	15,096	17,828	18,781
Automotive <sup>1 2</sup> .....	2,511	4,404	6,632	10,367	14,306	16,854	17,742
Nonautomotive.....	262	464	526	641	790	974	1,039
Factories.....	22	33	36	42	48	52	53
Mines.....	7	22	31	35	40	43	44
Railroads <sup>3</sup> .....	92	111	60	47	44	58	53
Merchant ships and sailing vessels.....	19	23	24	24	24	20	19
Farms <sup>4</sup> .....	70	165	212	240	272	292	302
Electric central stations <sup>2</sup> .....	54	88	133	217	307	372	404
Aircraft <sup>3 6</sup> .....	47	422	426	37	55	137	164

<sup>1</sup> Includes passenger cars, trucks, buses, and motorcycles. <sup>2</sup> As of July 1. <sup>3</sup> Beginning 1965, not strictly comparable with earlier years. <sup>4</sup> Includes Alaska and Hawaii. <sup>5</sup> Includes about 1.3 million hp. in work animals and 22,000 in windmills. <sup>6</sup> Includes private planes and commercial airliners.

Source: The Twentieth Century Fund, J. F. Dewhurst and Associates, *America's Needs and Resources, A New Survey*; and John A. Waring, *Transactions of Canadian Sectional Meeting, World Power Conference, 1958*, and unpublished estimates.

No. 774. MINERAL ENERGY RESOURCES AND ELECTRICITY—PRODUCTION AND CONSUMPTION: 1930 TO 1969

[In billions of British thermal units, except percent. Prior to 1960, excludes Alaska and Hawaii, except data for bituminous coal include Alaska for all years. Unit heat values used are: Anthracite, 12,700 B.t.u. per pound; bituminous coal and lignite 13,100 B.t.u. per pound; petroleum, 5,800,000 B.t.u. per barrel; natural gas, total production multiplied by 1,075 B.t.u. minus repressuring vent and waste gas multiplied by 1,035 prior to 1965, and by 1,032 thereafter. For electricity series, hydropower and nuclear power converted to coal input equivalent at prevailing average pounds of coal per kilowatt hour each year at central electric plants, using 12,000 B.t.u. per pound. See also *Historical Statistics, Colonial Times to 1957*, series M 71-87.]

YEAR	Total	COAL			Electricity	PERCENT					
		Anthra-cite	Bitu-minous and lignite	Crude petro-lemum <sup>1</sup>		Coal		Crude petro-lemum <sup>1</sup>	Natural gas <sup>2</sup>	Electricity	
						Anthra-cite	Bitu-minous and lignite				
<b>PRODUCTION</b>											
1930	22,119	1,762	12,249	5,208	2,148	(NA)	8.0	55.4	23.5	9.7 (NA)	
1940	25,088	1,308	12,072	7,849	2,979	(NA)	5.2	48.1	31.3	11.9 (NA)	
1950	34,510	1,120	13,527	11,449	6,841	(NA)	3.2	39.2	33.2	19.8 (NA)	
1955	38,900	665	12,174	14,410	10,204	(NA)	1.7	31.3	37.1	26.2 (NA)	
1960	41,704	478	10,886	14,935	13,822	1,583	1.1	26.1	35.8	33.2 3.8	
1965	50,015	378	13,417	16,521	17,628	2,071	0.8	26.8	33.0	35.2 4.2	
1966	52,861	329	13,086	17,561	18,885	2,100	0.6	26.5	33.2	35.7 4.0	
1967	55,813	312	14,479	18,651	19,971	2,400	0.6	25.9	33.4	35.8 4.3	
1968	57,716	291	14,285	19,308	21,372	2,460	0.5	24.8	33.5	37.0 4.2	
1969 (prel.)	59,947	274	14,560	19,510	22,772	2,822	0.5	24.3	32.5	38.0 4.7	
<b>CONSUMPTION</b>											
1930	22,288	1,718	11,921	5,652	2,212	(NA)	7.7	53.5	25.4	9.9 (NA)	
1940	23,908	1,245	11,290	7,487	2,969	(NA)	5.2	47.2	31.4	12.4 (NA)	
1950	34,153	1,013	11,900	12,706	6,933	(NA)	3.0	34.8	37.2	20.3 (NA)	
1955	39,956	589	11,104	16,328	10,428	(NA)	1.5	27.8	40.8	26.1 (NA)	
1960	44,816	447	9,967	18,608	14,163	1,631	1.0	22.2	41.6	31.6 3.6	
1965	53,969	328	12,030	21,566	17,950	2,095	0.6	22.3	40.0	33.2 3.9	
1966	57,130	290	12,740	22,703	19,284	2,113	0.5	22.3	39.8	33.7 3.7	
1967	59,156	274	12,587	23,484	20,414	2,397	0.5	21.3	39.7	34.5 4.0	
1968	62,463	258	13,069	24,880	21,803	2,453	0.4	20.9	39.9	34.9 3.9	
1969 (prel.)	65,753	243	13,302	25,954	23,440	2,814	0.4	20.2	39.5	35.6 4.3	

NA Not available.

<sup>1</sup> Includes commingled condensate. Beginning 1950, consumption includes petroleum products (net imports).

<sup>2</sup> Marketed production; includes amount stored and lost in transmission. Consumption includes dry and liquid gas. Beginning 1965, on pressure base of 14.73 pounds per square inch absolute; formerly, on base of 14.65.

Source: Dept. of the Interior, Bureau of Mines; *Minerals Yearbook*. Current data in *Mineral Industry Surveys*.

No. 775. CONSUMPTION OF ENERGY RESOURCES, BY MAJOR CONSUMER GROUP: 1963 to 1968

[In billions of British thermal units, except percent]

CONSUMER GROUP	ENERGY INPUTS				PERCENT DISTRIBUTION			
	1963	1965	1967	1968 (prel.)	1963	1965	1967	1968 (prel.)
	Total	49,649	53,969	59,156	62,463	100.0	100.0	100.0
Household and commercial	11,059	11,867	13,054	13,639	22.3	22.1	22.1	21.8
Industrial	16,225	17,734	18,540	19,348	32.7	32.6	31.3	31.0
Transportation <sup>1</sup>	11,964	12,715	14,150	15,135	24.1	23.6	23.9	24.2
Electrical generation, utilities <sup>2</sup>	9,663	11,104	13,135	14,045	19.5	20.6	22.2	22.5
Miscellaneous	738	549	277	206	1.5	1.0	0.5	0.5
Utility electricity purchased <sup>3</sup>	3,128	3,600	4,134	4,530	(X)	(X)	(X)	(X)

X Not applicable.

<sup>1</sup> Includes bunkers and military transportation.

<sup>2</sup> Represents outputs of hydropower and nuclear power converted to theoretical energy inputs at prevailing rate of pounds of coal per kilowatt-hour at central electric stations using 12,000 B.t.u. per pound coal. Excludes inputs for power generated by nonutility plants which are included within the other consuming sectors.

<sup>3</sup> Electricity generated and imported.

Source: Dept. of the Interior, Bureau of Mines; *Minerals Yearbook*.

# Electric Energy

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**No. 776. ELECTRIC ENERGY PRODUCTION AND INSTALLED GENERATING CAPACITY, BY CLASS OF OWNERSHIP AND TYPE OF PRIME MOVER: 1940 TO 1969**

[Production for calendar years; other data as of December 31. Prior to 1965, excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1957*, series S 15-35 and S 44-69]

ITEM	1940	1945	1950	1955	1960	1965	1968	1969 (prel.)
<b>Production (bil. kw.-hr.)</b>	<b>180</b>	<b>271</b>	<b>389</b>	<b>629</b>	<b>842</b>	<b>1,158</b>	<b>1,436</b>	<b>1,552</b>
Industrial plants <sup>1</sup>	38	49	60	82	88	102	107	110
Electric utilities (for public use)	142	222	329	547	753	1,055	1,329	1,442
Privately owned <sup>2</sup>	125	181	267	421	579	809	1,019	1,102
Percent of utility production	88.4	81.3	81.1	76.9	76.8	76.7	76.7	76.4
Publicly owned <sup>2</sup>	16	42	62	126	175	246	310	340
Municipal	6	10	15	26	37	50	64	70
Federal	9	28	40	89	112	145	171	183
Cooperatives and other	1	3	6	11	26	51	75	87
Source of energy (percent):								
Coal <sup>3</sup>	54.6	51.7	47.1	55.1	53.6	54.5	52.5	50.0
Oil	4.4	3.5	10.3	6.8	6.1	6.1	7.8	9.5
Gas	7.7	8.9	13.5	17.4	21.0	21.0	22.9	23.1
Hydro	33.4	35.9	29.2	20.7	19.3	18.4	16.7	17.3
Per kw. of capacity (kw.-hr.)	3,552	4,440	4,776	4,779	4,484	4,469	4,568	4,613
<b>Installed capacity (mil. kw.)</b>	<b>51</b>	<b>63</b>	<b>83</b>	<b>131</b>	<b>186</b>	<b>255</b>	<b>310</b>	<b>332</b>
Industrial plants <sup>1</sup>	11	13	14	16	18	18	19	19
Electric utilities (for public use)	40	50	69	114	168	236	291	313
Privately owned	34	40	55	87	128	178	221	239
Percent of utility capacity	86.2	80.4	80.1	75.9	76.5	75.2	75.8	76.6
Publicly owned <sup>2</sup>	6	10	14	28	40	59	70	73
Municipal	3	4	5	8	11	15	19	20
Federal	2	5	7	17	22	32	35	36
Cooperatives and other	(Z)	1	2	3	6	11	16	17
<b>TYPE OF PRIME MOVER</b>								
Electric utilities (for public use):								
Number of plants, total <sup>4</sup>	3,918	3,886	3,867	3,587	3,435	3,290	3,429	3,490
Hydro	1,474	1,505	1,458	1,381	1,331	1,231	1,207	1,194
Steam	1,153	1,057	1,051	1,045	1,060	1,068	1,206	1,275
Internal combustion	1,291	1,324	1,358	1,161	1,044	991	1,016	1,021
Production (bil. kw.-hr.)	142	222	329	547	753	1,055	1,329	1,442
Hydro (bil. kw.-hr.)	47	80	96	113	146	194	222	250
Steam (bil. kw.-hr.)	93	140	230	430	603	856	1,102	1,192
Internal combustion (bil. kw.-hr.)	2	2	4	4	4	5	5	
Installed capacity (mil. kw.)	40	50	69	114	168	236	291	313
Hydro	11	15	18	25	32	44	51	53
Steam	28	34	49	87	133	189	236	266
Internal combustion	1	1	2	2	3	3	4	4

Z. Less than 500,000 kw. <sup>1</sup> Plants of 100 kilowatts and over, including stationary powerplants of railroads.

<sup>2</sup> Noncentral stations included only in total prior to 1955; distributed to other publicly owned classes thereafter.

<sup>3</sup> Includes small percentage from wood and waste and also, in past few years, from nuclear fuel.

<sup>4</sup> Each prime mover type in combination plants counted separately.

<sup>5</sup> Includes gas turbine capacity: 6 million kilowatts in 1968 at 200 plants and 10 million kilowatts in 1969 at 268 plants.

Source: Federal Power Commission; press release no. 16364.

**No. 777. UTILITY ELECTRIC ENERGY USE, 1960 TO 1968, AND PROJECTED REQUIREMENTS, 1970 TO 1990**

[Excludes generation by industrial facilities and railways having generating facilities of their own]

YEAR	ENERGY USE			PEAK LOAD		
	Billion kw.-hr.	Percent increase		Million kw.	Percent increase	
		From 1960	For each interval		From 1960	For each interval
1960	764	(X)	(X)	138	(X)	(X)
1965	1,060	38.7	17.1	189	37.0	15.6
1966	1,150	50.5	8.5	206	49.3	9.0
1967	1,220	59.7	6.1	217	57.2	5.3
1968 (prel.)	1,334	74.6	9.3	244	76.8	12.4
1970	1,527	99.9	14.5	278	101.4	13.9
1975	2,194	187.2	43.7	398	188.4	43.2
1980	3,086	303.9	40.7	556	302.9	39.7
1985	4,263	458.0	38.1	769	457.2	38.3
1990	5,852	666.0	37.3	1,056	665.2	37.3

X Not applicable. <sup>1</sup> Represents increase from 1964.

Source: Federal Power Commission; news release no. 16323, and unpublished data.

No. 778. ELECTRIC UTILITIES—SUPPLY SYSTEMS AND GENERATING PLANTS, BY CLASS OF OWNERSHIP: 1950 TO 1968

[As of December 31. Prior to 1965, excludes Alaska and Hawaii. Excludes duplications of establishments operating in two or more States and nonutility plants producing primarily for industrial use]

ITEM	Total, all classes	Pri- vately owned	Cooper- atively owned	PUBLICLY OWNED			
				Total	Munic- ipal	Fed- eral	Other <sup>1</sup>
1950: Total electric supply systems.....	4,007	821	963	2,223	2,077	55	91
Utilities with generating plants.....	1,495	393	92	1,010	955	13	42
Number of generating plants.....	3,867	2,334	166	1,367	1,136	83	148
1955: Total electric supply systems.....	3,648	581	950	2,117	1,988	57	92
Utilities with generating plants.....	1,315	315	78	922	865	9	48
Number of generating plants.....	3,587	2,103	146	1,338	1,068	129	141
1960: Total electric supply systems.....	3,637	496	965	2,176	2,026	43	107
Utilities with generating plants.....	1,198	270	68	860	802	6	52
Number of generating plants.....	3,435	2,000	132	1,303	1,017	142	144
1965: Total electric supply systems.....	3,614	472	986	2,156	2,114	42	(?)
Utilities with generating plants.....	1,139	243	75	821	764	8	49
Number of generating plants.....	3,290	1,827	165	1,298	1,006	160	132
1968: Utilities with generating plants.....	1,117	242	77	798	735	9	54
Number of generating plants.....	3,429	1,942	165	1,322	1,013	169	140

<sup>1</sup> Public utility districts and State projects. <sup>2</sup> Municipal includes "Other publicly owned."

Source: Federal Power Commission; annual summaries.

No. 779. FEDERAL ELECTRIC UTILITY PROJECTS—INSTALLED CAPACITY AND INVESTMENT ALLOCATED TO ELECTRIC PLANT: 1955, 1960, AND 1968

[As of June 30. Comprises only electricity generating plant of these projects; excludes projects not primarily manufacturing electricity (e.g., West Point, Annapolis). Investments represent allocation to power projects for capital equipment and improvements. Reserves for depreciation not deducted]

PROJECT GROUP OR SYSTEM	INSTALLED CAPACITY (1,000 kw.)			INVESTMENT ALLOCATED <sup>2</sup> (mil. dol.)		
	1955 <sup>1</sup>	1960	1968	1955	1960	1968
	15,033	22,616	32,840	3,812	5,398	8,522
Total.....	13.1	13.5	11.3	(X)	(X)	(X)
Percent capacity of all electric utilities.....	522	630	1,130	134	138	238
Central Valley: Bureau of Reclamation.....						
Columbia Basin:						
Bonneville Power Administration (transmission).....	—	—	—	369	480	921
Bureau of Reclamation.....	2,259	2,282	2,316	218	277	273
Corps of Engineers.....	1,360	3,781	4,342	434	850	896
Hoover and Parker-Davis: Bureau of Reclamation.....	1,595	1,595	1,690	206	209	221
Missouri Basin:						
Bureau of Reclamation.....	362	397	1,161	214	304	577
Corps of Engineers.....	325	745	1,580	155	337	607
Southeastern Power Administration: Corps of Engineers.....	1,031	1,271	1,807	259	410	585
Southwestern Power Administration:						
Southwestern Power Administration (transmission).....	—	—	—	23	27	49
Corps of Engineers.....	426	601	1,425	121	203	413
Tennessee Valley Authority.....	7,005	11,032	16,063	1,634	2,054	3,113
Other projects.....	148	282	1,326	44	88	539
Bureau of Reclamation.....	83	218	1,262	20	62	510

<sup>1</sup> Represents zero. <sup>2</sup> Not applicable. <sup>3</sup> Excludes Alaska and Hawaii. <sup>4</sup> Includes estimates.

Source: Federal Power Commission; unpublished data.

No. 780. CONSUMPTION OF FUELS BY ELECTRIC UTILITIES: 1940 TO 1969

[In thousands of short tons, except as indicated. Prior to 1965, excludes Alaska and Hawaii. Includes use of fuels for stand-by purposes. See also *Historical Statistics, Colonial Times to 1957*, series S 36-43]

YEAR	Net genera- tion by fuel <sup>1</sup> (mil. kw.-hr.)	FUEL CONSUMED								
		Total coal equiv- alent	Coal			Oil (1,000 42-gal. bbl.)	Gas (mil. cu. ft.)	Per kilowatt-hour		
			Total <sup>2</sup>	Bitumi- nous <sup>2</sup>	Anthra- cite			Coal (lb.)	Oil (gal.)	Gas (cu. ft.)
1940.....	93,963	62,942	51,474	49,126	2,348	16,325	180,096	1.34	0.112	16.5
1950.....	232,813	138,421	91,871	88,262	3,609	75,420	628,919	1.19	0.094	14.1
1955.....	433,786	206,929	143,759	140,550	3,209	75,274	1,153,280	0.95	0.085	12.1
1960.....	607,142	266,064	176,634	173,882	2,751	85,340	1,724,762	0.88	0.078	10.9
1965.....	861,401	369,331	244,788	242,630	2,158	115,203	2,321,101	0.858	0.075	10.5
1968.....	1,106,952	481,275	297,779	295,576	2,203	188,642	3,147,909	0.870	0.076	10.3
1969 (prel.)	1,191,861	524,220	310,312	308,462	1,850	250,938	3,486,394	0.880	0.077	10.4

<sup>1</sup> Includes following kw.-hr., in millions: Nuclear power—3,657 in 1965, 12,528 in 1968, and 13,898 in 1969; wood, waste, and geothermal power—458 in 1965, 436 in 1968, and 615 in 1969. <sup>2</sup> Includes lignite.

Source: Federal Power Commission; annual summaries and related monthly reports.

# Electric Utilities

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## No. 781. ELECTRIC UTILITIES—INSTALLED GENERATING CAPACITY AND ELECTRIC ENERGY PRODUCTION, STATES: 1950 TO 1968

[Installed capacity in thousands of kilowatts; production in millions of kilowatt-hours. Installed capacity as of December 31; production for calendar years. Minus sign (−) denotes decrease]

STATE	INSTALLED CAPACITY					ENERGY PRODUCTION					Average annual percent increase, 1960-1968
	1950	1955	1960	1968	Average annual percent increase, 1960-1968	1950	1955	1960	1968		
U.S. <sup>1</sup>	68,919	114,472	168,568	291,058	7.1	329,141	547,938	755,375	1,329,443	7.3	
N.E.	4,052	5,271	7,045	11,325	6.1	16,211	22,610	28,808	51,338	7.5	
Maine	415	628	743	886	2.2	1,680	2,405	2,986	4,469	5.2	
N.H.	398	474	762	1,127	5.0	1,329	1,718	2,188	4,130	8.3	
Vt.	204	261	261	303	1.9	735	981	842	858	.2	
Mass.	1,653	2,167	2,971	5,103	7.0	6,588	9,461	13,309	23,786	7.5	
R.I.	359	401	427	400	-8.8	1,656	1,955	1,699	1,534	-1.3	
Conn.	1,022	1,345	1,880	3,506	8.1	4,223	6,091	7,804	16,562	9.9	
M.A.	13,225	18,218	25,536	39,764	5.7	63,372	86,140	112,749	184,657	6.4	
N.Y.	6,257	8,469	11,821	18,542	5.8	29,452	39,533	51,897	87,553	6.8	
N.J.	2,053	2,914	4,538	7,419	6.3	9,921	12,306	17,730	30,737	7.1	
Pa.	4,916	6,835	9,178	13,803	5.2	24,000	34,301	43,122	66,367	5.5	
E.N.C.	16,083	25,976	36,780	54,535	5.1	75,349	125,853	185,101	263,489	6.0	
Ohio	4,420	7,459	10,612	14,383	3.9	21,967	35,955	49,480	72,432	4.9	
Ind.	2,142	4,351	6,566	9,428	4.6	10,374	21,193	30,966	48,024	5.7	
Ill.	4,506	6,955	9,354	15,570	6.6	20,686	38,997	43,085	68,017	5.9	
Mich.	3,222	4,590	6,758	10,122	5.2	15,316	22,365	27,672	52,102	8.2	
Wis.	1,783	2,622	3,490	5,032	4.7	7,006	10,343	13,888	22,914	6.5	
W.N.C.	5,024	7,930	11,538	20,844	7.7	19,237	30,463	43,734	80,573	7.9	
Minn.	1,151	1,764	2,434	3,715	5.4	4,549	6,642	9,613	15,832	6.4	
Iowa	1,173	1,554	2,011	3,411	6.8	4,428	6,212	7,927	12,684	6.1	
Mo.	988	1,743	2,697	5,566	9.5	3,718	6,952	10,552	20,055	8.4	
N. Dak.	187	264	666	1,117	6.7	660	963	1,780	5,660	15.6	
S. Dak.	169	491	545	1,640	14.8	536	1,399	1,700	6,137	17.4	
Nebr.	572	762	1,224	2,004	6.3	2,011	2,816	4,351	6,786	5.7	
Kans.	814	1,353	1,960	3,391	7.1	3,335	5,478	7,810	13,419	7.0	
S.A.	8,857	15,131	22,696	44,078	8.7	43,604	71,220	103,636	210,433	9.3	
Del.	28	224	425	823	8.6	20	1,366	2,262	4,868	10.1	
Md.	1,099	1,373	2,077	4,134	9.0	5,040	5,845	9,240	21,975	11.4	
D.C.	508	533	533	1,115	9.7	1,669	1,627	976	2,043	9.7	
Va.	1,204	1,931	3,570	5,433	5.4	6,233	9,380	18,285	25,784	4.4	
W. Va.	1,256	2,177	3,217	5,814	3.6	7,821	14,239	14,013	31,753	10.8	
N. C.	1,760	3,505	4,307	7,939	7.7	9,829	15,592	20,000	43,572	10.2	
S.C.	847	1,652	2,249	3,207	4.5	2,910	5,870	10,238	14,556	4.5	
Ga.	1,156	1,675	2,286	5,052	10.7	5,285	7,705	10,655	22,128	9.6	
Fla.	999	2,061	3,992	10,562	12.9	4,847	9,593	17,987	43,755	11.8	
E.S.C.	4,464	11,657	16,614	27,332	6.4	24,606	66,530	87,691	135,109	5.6	
Ky.	904	2,745	3,362	6,681	9.0	4,390	17,693	19,899	35,134	7.4	
Tenn.	1,670	4,628	7,521	9,438	2.9	9,379	24,625	40,071	45,980	1.7	
Ala.	1,690	3,654	4,700	9,088	8.6	9,577	21,348	24,594	45,220	7.9	
Miss.	200	631	1,032	2,126	9.5	1,260	2,864	3,127	8,776	13.8	
W.S.C.	4,717	9,449	16,401	34,365	9.7	22,515	40,824	64,608	138,325	10.0	
Ark.	450	1,165	1,188	2,713	10.9	1,975	4,909	5,244	10,040	8.5	
La.	909	1,594	2,934	5,995	9.3	4,936	6,677	11,865	26,155	10.4	
Okla.	723	1,260	2,225	3,784	6.9	2,927	5,337	8,299	16,942	9.3	
Tex.	2,636	5,430	10,054	21,873	10.2	12,676	23,900	39,200	85,187	10.2	
Mt.	3,445	6,106	8,700	15,177	7.2	16,497	24,155	36,611	58,372	6.0	
Mont.	442	925	1,353	1,832	3.9	3,136	4,696	5,992	9,495	5.9	
Idaho	445	781	1,255	1,261	.1	2,538	3,907	6,165	6,746	1.1	
Wyo.	139	236	382	1,122	14.4	595	724	1,588	4,455	13.8	
Colo.	464	959	1,317	2,758	9.7	1,856	3,719	5,571	9,922	7.5	
N. Mex.	281	459	802	1,951	11.8	1,014	1,765	3,041	8,612	13.9	
Ariz.	843	1,626	2,266	3,947	7.2	3,489	5,635	8,562	11,286	3.5	
Utah	235	523	606	793	3.4	659	2,377	3,038	3,147	.4	
Nev.	596	597	720	1,514	9.7	3,210	1,431	2,655	4,708	7.4	
Pac. 1	9,054	14,733	23,256	43,637	8.2	47,751	79,245	112,437	207,148	7.9	
Wash.	2,765	4,074	7,215	11,605	6.1	17,371	24,030	34,153	68,044	9.0	
Oreg.	973	2,046	2,614	4,201	6.1	5,545	12,703	12,425	20,377	6.4	
Calif.	5,316	8,612	12,862	26,675	9.5	24,836	42,512	63,834	114,493	7.6	
Alaska	(N.A.)	(N.A.)	117	315	13.2	(N.A.)	(N.A.)	359	975	13.3	
Hawaii	(N.A.)	(N.A.)	449	840	8.2	(N.A.)	1,666	3,259	8.7		

N.A. Not available. <sup>1</sup> Prior to 1960, excludes Alaska and Hawaii.

Source: Federal Power Commission; annual summaries and Press Release No. 16634.

No. 782. ELECTRIC UTILITIES AND INDUSTRIAL PLANTS—INSTALLED GENERATING CAPACITY, BY TYPE OF PRIME MOVER AND CLASS OF OWNERSHIP, STATES: 1968

[In thousands of kilowatts. As of December 31]

STATE	Total	TYPE OF PRIME MOVER				CLASS OF OWNERSHIP OF ELECTRIC UTILITIES			Industrial plants	
		Electric utilities and industrial		Electric utilities		Total	Privately owned	Publicly owned		
		Fuel	Hydro	Fuel	Hydro			Municipal	Other <sup>1</sup>	
United States	310,181	258,307	51,874	239,890	51,168	291,058	220,766	19,429	50,863	19,123
New England	12,562	11,060	1,501	10,090	1,235	11,325	11,011	272	42	1,237
Maine	1,300	875	515	543	343	886	865	3	18	503
New Hampshire	1,202	775	427	741	386	1,127	1,123	4	-	75
Vermont	323	124	200	116	187	303	289	14	-	20
Massachusetts	5,569	5,350	219	4,922	181	5,103	4,896	199	8	466
Rhode Island	419	416	3	398	2	400	393	2	5	19
Connecticut	3,659	3,521	138	3,372	135	3,506	3,445	50	11	153
Middle Atlantic	41,745	36,132	5,613	34,214	5,550	39,764	36,391	240	3,133	1,981
New York	19,051	15,019	4,082	14,568	3,974	18,542	15,313	106	3,123	509
New Jersey	7,695	7,349	347	7,074	345	7,419	7,358	58	2	277
Pennsylvania	14,998	13,764	1,234	12,572	1,231	13,803	13,720	75	8	1,195
East North Central	58,940	57,998	942	53,681	854	54,535	51,274	2,678	583	4,405
Ohio	15,586	15,584	2	14,381	2	14,383	13,639	730	14	1,203
Indiana	10,553	10,459	94	9,334	94	9,428	9,099	329	-	1,125
Illinois	16,128	16,091	36	15,537	34	15,570	14,881	545	144	558
Michigan	11,173	10,782	390	9,766	356	10,122	9,129	843	150	1,050
Wisconsin	5,501	5,082	419	4,663	369	5,032	4,526	232	274	470
West North Central	21,700	18,561	3,139	17,747	3,097	20,844	13,212	2,879	4,753	855
Minnesota	4,233	4,064	169	3,579	137	3,715	3,161	457	97	518
Iowa	3,538	3,404	133	3,278	133	3,411	2,703	495	213	127
Missouri	5,680	4,879	801	4,765	801	5,566	4,430	617	519	114
North Dakota	1,139	739	400	717	400	1,117	234	16	867	22
South Dakota	1,649	257	1,392	256	1,384	1,640	215	41	1,385	9
Nebraska	2,009	1,771	238	1,766	238	2,004	-	391	1,613	5
Kansas	3,452	3,447	5	3,386	5	3,391	2,468	863	60	61
South Atlantic	47,001	41,545	5,456	38,796	5,282	44,078	39,669	2,408	2,001	2,923
Delaware	857	857	-	823	-	823	779	44	-	34
Maryland	4,361	3,867	494	3,640	494	4,134	4,060	67	7	227
Dist. of Columbia	1,127	1,124	3	1,112	3	1,115	1,112	-	3	13
Virginia	5,892	5,028	864	4,591	842	5,433	5,150	52	232	459
West Virginia	6,426	6,219	207	5,714	101	5,814	5,814	-	-	612
North Carolina	8,247	6,423	1,825	6,126	1,813	7,939	7,530	47	362	308
South Carolina	3,709	2,755	954	2,272	935	3,207	2,502	5	700	502
Georgia	5,463	4,393	1,070	3,995	1,056	5,052	4,430	-	622	411
Florida	10,919	10,880	39	10,523	39	10,562	8,293	2,192	76	357
East South Central	28,243	23,137	5,106	22,235	5,098	27,332	9,088	404	17,841	910
Kentucky	6,713	6,042	671	6,010	671	6,681	2,350	262	4,089	32
Tennessee	9,703	7,709	1,994	7,444	1,994	9,438	172	(2)	9,266	265
Alabama	9,576	7,135	2,441	6,655	2,433	9,088	4,583	(2)	4,506	488
Mississippi	2,251	2,251	-	1,216	-	2,126	1,984	142	-	126
West South Central	39,296	37,404	1,892	32,473	1,892	34,365	27,911	3,548	2,907	4,931
Arkansas	3,018	2,117	900	1,813	900	2,713	1,628	77	1,008	304
Louisiana	7,531	7,531	-	5,995	-	5,995	5,274	721	-	1,536
Oklahoma	3,825	3,270	555	3,229	555	3,784	2,767	168	849	42
Texas	24,921	24,485	436	21,437	436	21,873	18,242	2,582	1,049	3,048
Mountain	16,042	9,636	6,406	8,776	6,401	15,177	9,583	452	5,142	865
Montana	1,837	326	1,512	320	1,512	1,832	1,082	-	750	5
Idaho	1,292	41	1,251	10	1,251	1,261	1,039	13	209	32
Wyoming	1,162	939	223	899	223	1,122	891	2	229	40
Colorado	2,856	2,233	623	2,135	623	2,758	1,971	298	488	98
New Mexico	2,072	2,047	24	1,927	24	1,951	1,718	78	155	121
Arizona	4,200	2,318	1,882	2,068	1,879	3,947	1,484	2	2,511	253
Utah	1,039	831	208	585	208	793	611	55	127	246
Nevada	1,584	901	683	832	682	1,514	838	4	673	70
Pacific	44,653	22,833	21,820	21,878	21,759	43,637	22,629	6,547	14,461	1,016
Washington	11,938	1,349	10,589	1,040	10,566	11,605	1,053	1,972	8,581	333
Oregon	4,365	325	4,040	181	4,020	4,201	1,596	142	2,463	164
California	27,006	19,913	7,093	19,584	7,091	26,675	19,113	4,342	3,221	330
Alaska	366	287	79	236	79	315	26	92	197	50
Hawaii	978	960	19	836	3	840	840	-	-	139

- Represents zero.

Z Less than 500 kw.

<sup>1</sup> Includes Federal, State, public utility districts, and cooperatives.

Source: Federal Power Commission; annual summaries and related monthly reports.

# Electric Energy

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## No. 783. ELECTRIC ENERGY—PRODUCTION, BY TYPE OF PRIME MOVER AND CLASS OF OWNERSHIP, STATES: 1968

[In millions of kilowatt-hours]

STATE	Total	TYPE OF PRIME MOVER				CLASS OF OWNERSHIP OF ELECTRIC UTILITIES			Industrial plants	
		Electric utilities and industrial		Electric utilities		Total	Pri-vately owned	Publicly owned		
		Fuel	Hydro	Fuel	Hydro			Municipal	Other <sup>1</sup>	
U.S.	1,436,029	1,210,156	225,873	1,106,952	222,491	1,329,443	1,019,313	63,804	246,326	106,586
N.E.	56,140	50,395	5,745	46,824	4,513	51,338	50,476	734	128	4,802
Maine	7,185	4,583	2,603	2,761	1,707	4,469	4,418	16	34	2,717
N.H.	4,496	3,291	1,205	3,103	1,028	4,130	4,128	3	—	365
Vt.	932	141	791	125	733	858	815	43	—	74
Mass.	24,858	24,078	780	23,100	686	23,736	23,160	614	12	1,072
R.I.	1,581	1,577	5	1,529	4	1,534	1,490	4	40	48
Conn.	17,088	16,726	362	16,207	355	16,562	16,465	54	42	528
M.A.	194,036	168,181	25,855	159,108	25,549	184,657	162,704	826	21,126	9,379
N.Y.	89,941	64,927	25,014	62,824	24,730	87,553	66,046	404	21,104	2,388
N.J.	31,893	32,235	2,342	31,085	2,348	30,737	30,501	281	4	1,157
Pa.	72,201	71,019	1,182	65,199	1,168	66,367	66,157	192	19	5,834
E.N.C.	286,988	281,977	5,011	253,022	4,467	263,489	252,531	8,107	2,851	23,498
Ohio	79,025	79,017	8	72,424	8	72,432	70,267	2,073	92	6,593
Ind.	54,065	53,541	524	47,501	524	48,024	46,947	1,078	—	6,040
Ill.	70,901	70,735	166	67,870	147	68,017	66,103	1,482	432	2,884
Mich.	57,715	55,796	1,919	50,363	1,739	52,102	48,469	2,877	756	5,613
Wis.	25,282	22,888	2,394	20,865	2,049	22,914	20,746	598	1,570	2,368
W.N.C.	85,205	72,503	12,701	68,079	12,494	80,573	53,442	6,983	20,148	4,632
Minn.	18,724	17,716	1,008	14,998	934	15,832	14,545	1,094	193	2,892
Iowa	13,357	12,405	951	11,734	950	12,684	11,066	1,070	548	673
Mo.	20,598	19,265	1,334	18,722	1,334	20,055	15,805	1,695	2,554	543
N. Dak.	5,740	3,240	2,499	3,161	2,499	5,660	691	6	4,964	80
S. Dak.	6,168	523	5,645	523	5,614	6,137	519	8	5,610	31
Nebr.	6,795	5,541	1,254	5,532	1,254	6,786	—	818	5,968	9
Kans.	13,823	13,813	10	13,409	10	13,419	10,817	2,291	311	404
S.A.	227,839	213,662	14,177	196,983	13,450	210,433	196,811	7,470	6,152	17,405
Del.	5,058	5,058	—	4,868	—	4,868	4,711	157	—	190
Md.	23,572	21,963	1,609	20,366	1,609	21,975	21,761	177	37	1,598
D.C.	2,098	2,096	1	2,042	1	2,043	2,042	—	1	54
Va.	28,438	27,653	785	25,044	740	25,784	25,187	255	342	2,654
W. Va.	35,636	34,667	968	31,335	418	31,753	31,753	—	—	3,882
N.C.	45,231	40,510	4,722	38,869	4,703	43,572	42,400	43	1,129	1,659
S.C.	16,881	14,179	2,702	11,905	2,650	14,556	11,636	11	2,908	2,326
Ga.	24,950	21,802	3,148	19,040	3,088	22,128	20,775	—	1,352	2,822
Fla.	45,975	45,734	242	43,513	242	43,755	36,545	6,826	384	2,221
E.S.C.	140,345	122,315	18,030	117,104	18,005	135,109	43,084	1,449	90,576	5,235
Ky.	35,222	32,296	2,927	32,207	2,927	35,134	10,155	1,143	23,836	89
Tenn.	47,430	39,709	7,721	38,258	7,721	45,980	736	—	45,244	1,450
Ala.	47,945	40,564	7,382	37,864	7,357	45,220	23,724	—	21,497	2,725
Miss.	9,746	9,746	—	8,776	—	8,776	8,460	306	—	971
W.S.C.	171,622	165,764	5,858	132,467	5,858	138,325	119,517	9,384	9,423	33,297
Ark.	12,332	9,327	3,005	7,035	3,005	10,040	6,713	88	3,235	2,292
La.	36,986	36,986	—	26,155	—	26,155	24,558	1,598	—	10,830
Okla.	17,182	15,656	1,526	15,416	1,526	16,942	14,108	454	2,379	241
Tex.	105,122	103,795	1,326	83,861	1,326	85,187	74,138	7,244	3,805	19,934
Mt.	62,581	36,488	26,093	32,296	26,075	58,372	39,057	1,282	18,033	4,209
Mont.	9,511	586	8,925	570	8,925	9,495	5,977	—	3,518	16
Idaho	6,904	158	6,746	(Z)	6,746	6,746	5,470	80	1,196	157
Wyo.	4,641	3,681	959	3,496	959	4,435	3,494	—	961	185
Colo.	10,411	9,467	944	8,979	943	9,922	6,781	910	2,231	499
N. Mex.	9,131	9,089	43	8,569	43	8,612	8,073	179	360	520
Ariz.	12,453	6,744	5,709	5,591	5,695	11,286	3,894	10	7,382	1,166
Utah	4,618	3,601	1,017	2,133	1,014	3,147	2,362	98	656	1,471
Nev.	4,913	3,163	1,750	2,959	1,749	4,708	3,004	4	1,700	204
Pac.	211,275	98,871	112,404	95,069	112,079	207,148	101,691	27,569	77,889	4,127
Wash.	69,192	4,965	64,326	3,903	64,141	68,044	4,622	7,897	55,525	1,148
Oreg.	21,013	567	20,446	1	20,376	20,377	6,609	438	13,330	635
Calif.	116,070	88,895	27,175	87,319	27,175	114,493	87,121	18,926	8,446	1,577
Alaska	1,264	900	364	611	364	975	79	308	587	289
Hawaii	3,737	3,643	94	3,236	23	3,259	3,259	—	—	479

<sup>—</sup> Represents zero. <sup>Z</sup> Less than 500,000 kw.-hr.

<sup>1</sup> Includes Federal, State, public utility districts, and cooperatives. <sup>2</sup> Deduct.

Source: Federal Power Commission; annual summaries and related monthly reports.

No. 784. ELECTRIC LIGHT AND POWER INDUSTRY—ENERGY GENERATED, SALES, REVENUE, AND CUSTOMERS: 1950 TO 1969

[Prior to 1960, excludes Alaska and Hawaii]

CLASS		1950	1955	1960	1965	1967	1968	1969
Energy generated <sup>1</sup>	bil. kw.-hr.	329	547	755	1,055	1,214	1,329	<sup>2</sup> 1,442
Sales to ultimate customers	bil. kw.-hr.	<sup>3</sup> 281	<sup>3</sup> 481	683	953	1,107	1,202	1,307
Residential or domestic	bil. kw.-hr.	67	125	196	281	332	368	408
Percent of total		23.8	26.0	28.7	29.5	30.0	30.6	31.2
Commercial and industrial:								
Small light and power	bil. kw.-hr.	50	78	115	202	242	265	287
Large light and power	bil. kw.-hr.	139	268	345	433	486	519	557
All other	bil. kw.-hr.	17	20	27	37	47	50	55
Revenue from ultimate customers	mil. dol.	<sup>3</sup> 5,088	<sup>3</sup> 8,020	11,516	15,158	17,223	18,580	20,139
Residential or domestic	mil. dol.	1,932	3,323	4,856	6,329	7,184	7,802	8,532
Percent of total		38.0	41.4	42.2	41.8	41.7	42.0	42.4
Commercial and industrial:								
Small light and power	mil. dol.	1,334	1,944	2,828	4,313	4,936	5,315	5,705
Large light and power	mil. dol.	1,405	2,416	3,384	3,885	4,365	4,672	5,045
All other	mil. dol.	258	337	498	632	738	791	857
Ultimate customers, Dec. 31		1,000	<sup>3</sup> 44,986	<sup>3</sup> 52,559	58,870	65,558	68,168	69,716
Residential or domestic		1,000	37,533	45,828	51,446	57,596	60,034	61,439
Commercial and industrial:								
Small light and power		1,000	5,466	6,156	6,760	7,420	7,580	7,707
Large light and power		1,000	235	402	454	310	324	334
All other		1,000	157	173	210	232	230	236

<sup>1</sup> Source: Federal Power Commission. <sup>2</sup> Preliminary. <sup>3</sup> Includes rural customers, not shown separately.

Source: Edison Electric Institute, New York, N.Y.; *Statistical Year Book*.

No. 785. ELECTRIC ENERGY SALES, BY CLASS OF SERVICE—STATES: 1968

[In millions of kilowatt-hours]

STATE	Total <sup>1</sup>	Resi- dential	Com- mercial	Indus- trial	STATE	Total <sup>1</sup>	Resi- dential	Com- mercial	Indus- trial
U.S.	1,199,143	380,460	257,405	519,145	S.A.—Con.				
N.E.	48,029	17,425	12,230	17,196	W. Va.	14,190	3,112	2,049	8,915
Maine	4,459	1,455	640	2,220	N.C.	33,749	11,759	6,623	14,320
N.H.	3,029	1,168	493	1,273	S.C.	18,149	5,847	2,849	8,870
Vt.	2,050	932	378	632	Ga.	25,610	9,732	6,035	9,564
Mass.	21,251	7,578	6,204	7,036	Fla.	39,716	18,272	10,309	8,638
R.I.	3,413	1,155	910	1,186	E.S.C.	116,889	34,130	11,953	67,964
Conn.	13,818	5,137	3,604	4,849	Ky.	28,322	5,133	1,761	20,373
M.A.	176,251	50,581	42,116	74,003	Tenn.	48,083	15,336	4,766	27,301
N.Y.	77,482	21,394	23,462	25,197	Ala.	28,183	8,329	3,366	15,825
N.J.	32,601	9,933	8,553	13,692	Miss.	12,301	5,332	2,060	4,465
Pa.	66,168	19,254	10,101	35,114	W.S.C.	126,756	41,343	26,853	53,532
E.N.C.	243,248	71,526	46,352	116,246	Ark.	11,578	3,251	1,965	5,975
Ohio	77,274	18,453	10,902	45,555	La.	24,026	7,493	5,074	9,508
Ind.	33,187	11,297	5,298	16,391	Okl.	13,510	5,360	3,031	4,460
Ill.	61,207	18,765	16,097	22,377	Tex.	77,642	25,239	16,783	33,689
Mich.	49,939	14,493	9,341	24,060	Mt.	54,248	14,610	13,896	23,433
Wis.	21,641	8,518	4,714	7,863	Mont.	7,433	1,373	805	4,982
W.N.C.	76,415	30,981	15,826	27,252	Idaho	9,868	2,049	1,808	5,947
Minn.	17,379	7,617	2,285	7,150	Wyo.	3,262	468	601	2,122
Iowa	13,197	5,436	2,815	4,553	Colo.	9,039	3,221	3,437	2,039
Mo.	22,345	7,930	4,633	8,981	N. Mex.	4,771	1,233	1,442	1,663
N. Dak.	2,389	1,214	483	565	Ariz.	10,700	3,198	2,989	3,885
S. Dak.	2,431	1,354	697	277	Utah	4,430	1,465	1,254	1,358
Nebr.	6,778	3,233	1,909	1,305	Nev.	4,750	1,603	1,560	1,437
Kans.	11,896	4,197	3,004	4,421	Pac.	173,568	54,062	47,180	70,328
S.A.	183,739	65,802	40,999	69,191	Wash.	42,175	13,428	5,254	23,086
Del.	3,872	1,000	688	2,166	Oreg.	22,858	8,594	5,389	8,611
Md. <sup>2</sup>	22,959	6,891	6,508	9,084	Calif.	104,561	30,544	35,604	37,184
Va.	25,494	9,189	5,938	7,634	Alaska	842	395	337	67
					Hawaii	3,132	1,101	596	1,380

<sup>1</sup> Includes "Other" service, not shown separately. <sup>2</sup> Includes District of Columbia.

Source: Federal Power Commission; *Annual Report*, and unpublished data.

# Utility Companies

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## No. 786. ELECTRIC UTILITIES—BALANCE SHEET AND INCOME ACCOUNT OF PRIVATELY-OWNED COMPANIES: 1940 TO 1968

[In millions of dollars. Prior to 1960, excludes Alaska and Hawaii. Data cover reports of all companies with annual electric revenues over \$1 million representing about 98 percent of the privately-owned companies. See also *Historical Statistics, Colonial Times to 1957*, series V 128-142]

ITEM	1940	1945	1950	1955	1960	1965	1968
<b>COMPOSITE BALANCE SHEET</b>							
<b>Assets and other debits</b>	<b>15,477</b>	<b>14,452</b>	<b>20,523</b>	<b>30,992</b>	<b>44,742</b>	<b>56,395</b>	<b>71,099</b>
Electric utility plant	10,447	12,176	18,956	30,307	45,456	59,703	76,026
Provisions for depreciation and amortization <sup>1</sup>	(NA)	(NA)	5,352	5,715	8,889	13,631	17,446
Net electric utility plant	(NA)	(NA)	15,124	24,594	36,567	46,072	53,780
Other utility plant	2,390	2,315	2,485	3,402	4,852	6,613	7,914
Provisions for depreciation and amortization <sup>1</sup>	(NA)	(NA)	554	678	963	1,418	1,794
Net other utility plant	(NA)	(NA)	1,951	2,724	3,889	5,105	6,120
Total utility plant	14,407	14,491	21,441	33,709	50,308	66,315	83,940
Provisions for depreciation and amortization <sup>1</sup>	1,913	3,045	4,366	6,391	9,852	16,048	19,040
Net total utility plant	12,494	11,446	17,075	27,318	40,456	51,267	64,900
Other property and investments	1,380	1,090	1,237	933	1,004	1,247	1,485
Current and accrued assets	1,128	1,672	2,058	2,567	3,066	3,639	4,439
Deferred debits	480	244	153	174	216	242	295
<b>Liabilities and other credits</b>	<b>15,477</b>	<b>14,452</b>	<b>20,523</b>	<b>30,992</b>	<b>44,742</b>	<b>56,395</b>	<b>71,099</b>
Capital stock	6,471	5,950	7,621	10,404	13,322	15,688	17,746
Other paid-in capital	255	282	589	1,083	1,747	2,622	3,260
Earned surplus	860	766	1,346	2,191	3,736	5,712	7,742
Long-term debt	6,895	6,118	9,179	14,316	21,035	25,502	33,519
Current and accrued liabilities	692	965	1,527	2,381	3,112	4,222	5,646
Deferred credits and operating reserves	261	325	195	247	277	546	809
Contributions in aid of construction	43	46	66	109	188	264	386
Accumulated deferred income taxes	-	-	-	261	1,325	1,829	1,991
<b>COMPOSITE INCOME ACCOUNTS</b>							
Electric operating revenues	2,404	3,171	4,784	7,199	10,116	13,400	16,539
Electric operating expenses	1,667	2,408	3,828	5,702	7,917	10,206	12,778
Net electric operating revenues	737	763	956	1,497	2,199	3,104	3,781
Income from electric plant leased to others	7	5	5	3	2	3	3
Electric utility operating income	744	768	961	1,500	2,201	3,107	3,764
Other utility operating income	61	65	72	120	196	301	345
Total utility operating income	805	833	1,033	1,620	2,397	3,409	4,109
Other income	68	54	68	68	79	97	124
Total income	873	887	1,101	1,683	2,476	3,506	4,233
Income deductions	325	353	279	439	693	925	1,238
Net income	548	534	822	1,244	1,783	2,581	2,995

<sup>1</sup> Represents zero. NA Not available. <sup>2</sup> Accumulated.

<sup>2</sup> Includes amounts unclassified as to utility departments: \$2,309 million in 1940 and \$491 million in 1945.

Source: Federal Power Commission; *Statistics of Privately Owned Electric Utilities in the United States*.

## No. 787. LARGEST PUBLIC UTILITY COMPANIES—ASSETS, REVENUES, INCOME, AND INVESTED CAPITAL, BY RANK OF ASSETS: 1969

[In millions of dollars, except percent. As of December 31 or calendar year, as applicable]

ASSET GROUP	INCLUDING TELEPHONE COMPANIES <sup>1</sup>				EXCLUDING TELEPHONE COMPANIES			
	Assets <sup>2</sup>	Operating revenues <sup>3</sup>	Net income	Invested capital <sup>4</sup>	Assets <sup>2</sup>	Operating revenues <sup>3</sup>	Net income	Invested capital <sup>4</sup>
50 largest	117,569	37,347	5,015	49,914	74,062	21,776	2,841	26,682
Lowest ten	8,377	2,498	370	3,383	7,925	2,342	334	3,183
Second ten	10,295	3,187	390	3,580	10,014	3,131	405	3,645
Third ten	12,748	4,260	504	4,383	12,479	4,241	495	4,295
Fourth ten	16,554	4,569	594	5,601	16,062	4,545	596	5,566
Highest ten	69,595	22,834	3,157	32,966	27,583	7,517	1,011	10,014
Percent of total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lowest ten	7.1	6.7	7.4	6.8	10.7	10.8	11.8	11.9
Second ten	8.8	8.5	7.8	7.2	13.5	14.4	14.3	13.7
Third ten	10.8	11.4	10.0	8.8	16.8	19.5	17.4	16.1
Fourth ten	14.1	12.2	11.8	11.2	21.7	20.9	21.0	20.9
Highest ten	59.2	61.1	63.0	66.0	37.2	34.5	35.6	37.5

<sup>1</sup> American Telephone and Telegraph Co., and Continental Telephone Co.

<sup>2</sup> Total assets employed in business, net of depreciation; includes consolidated subsidiaries. <sup>3</sup> Gross receipts from operations during year; includes nonutility revenues from manufacturing, transportation, etc.

<sup>4</sup> Capital stock, surplus, and retained earnings (i.e., net worth).

Source: Fortune, New York, N.Y.; adapted from *The Fortune Directory*, 1970. (Copyright, 1970, by Time Inc.)

No. 788. RURAL ELECTRIFICATION ADMINISTRATION—ELECTRIC PROGRAM,  
SUMMARY OF OPERATIONS: 1940 TO 1969

[Includes data from date of first loan to borrowers in Virgin Islands (1940) and Puerto Rico (1952)]

ITEM	1940	1950	1955	1960	1965	1967	1968	1969 <sup>1</sup>
<b>Loans approved, cumulative, Dec. 31:<sup>2</sup></b>								
Borrowers <sup>3</sup>	791	1,076	1,077	1,087	1,103	1,101	1,101	1,098
Amount..... mil. dol.	351	2,312	3,125	4,256	5,793	6,403	6,822	7,151
<b>Systems in operation, Dec. 31:<sup>4</sup></b>								
Systems <sup>5</sup>	685	1,007	1,026	1,038	1,052	1,052	1,052	1,050
Miles energized <sup>6</sup> ..... 1,000	268	1,089	1,362	1,465	1,567	1,607	1,627	1,649
Consumers served..... 1,000	674	3,413	4,251	4,826	5,541	5,806	5,986	6,176
<b>Borrowers' operations during year:<sup>7</sup></b>								
Energy generated..... mil. kw.-hr.	(NA)	1,077	3,255	4,922	8,833	13,710	14,509	16,682
Energy purchased..... mil. kw.-hr.	(NA)	7,270	14,996	26,057	39,104	45,400	50,917	55,577
Energy sold..... mil. kw.-hr.	(NA)	6,884	15,739	27,269	42,668	52,880	58,303	64,513
Revenue..... mil. dol.	(NA)	229	420	615	847	977	1,060	1,147
Average monthly consumption per consumer, all consumers..... kw.-hr.	(NA)	180	306	466	654	751	812	858
Residential consumers <sup>8</sup> ..... kw.-hr.	(NA)	147	242	357	479	543	593	630
Total utility plant..... mil. dol.	(NA)	(NA)	2,706	3,697	4,978	5,776	6,167	6,540
Employees.....	(NA)	(NA)	(NA)	(NA)	31,702	33,457	34,563	35,600

NA. Not available. <sup>1</sup> Preliminary, except loans approved.

<sup>2</sup> Net; i.e., excludes loans rescinded. For 1940, includes amounts not yet under loan contract.

<sup>3</sup> Organizations, mainly cooperatives, to which loans for extending central station electric service in rural areas are made. <sup>4</sup> Includes data at time of repayment of loan for borrowers whose loans have been repaid in full. As of Dec. 31, 1969, there were 66 such borrowers, with 26,292 miles energized and 147,624 consumers served.

<sup>5</sup> Rural electric distribution, generation, and transmission systems operated by REA borrowers.

<sup>6</sup> Pole miles of electric distribution and transmission line in service. <sup>7</sup> Excludes energy sales and revenues of power sold by one REA borrower to another. <sup>8</sup> Includes rural-nonfarm and farm consumers.

Source: Dept. of Agriculture, Rural Electrification Administration; *Annual Statistical Report—Rural Electrification Borrowers*.

No. 789. WATER POWER—DEVELOPED, 1950, 1960, AND 1968, AND ESTIMATED UNDEVELOPED, 1968, STATES

[In thousands of kilowatts. As of December 31]

STATE	DEVELOPED WATER POWER <sup>1</sup> (CAPACITY OF ACTUAL INSTALLATIONS ONLY)			Estimated undevel- oped water power, 1968	STATE	DEVELOPED WATER POWER <sup>1</sup> (CAPACITY OF ACTUAL INSTALLATIONS ONLY)			Esti- mated undevel- oped water power, 1968
	1950	1960	1968			1950	1960	1968	
U.S. ....	<sup>2</sup> 18,675	33,180	48,741	129,709	S.A.—Con.				
N.E. ....	1,239	1,520	1,487	3,302	W. Va.	208	208	208	1,994
Maine....	391	495	508	1,716	N.C.	962	1,220	1,765	927
N.H. ....	312	445	427	796	S.C.	679	958	953	1,863
Vt. ....	192	199	200	339	Ga.	425	653	1,069	3,198
Mass....	223	227	218	268	Fla.	13	42	39	83
R.I. ....	11	3	3	—	E.S.C.	2,729	3,750	5,106	3,660
Conn....	107	151	131	183	Ky.	271	541	671	1,485
M.A. ....	1,678	2,472	4,243	4,545	Tenn.	1,238	1,910	1,994	591
N.Y. ....	1,225	2,028	3,805	1,294	Ala.	1,220	1,299	2,441	1,444
N.J. ....	9	8	8	241	Miss.	—	—	—	140
Pa. ....	444	436	430	3,010	W.S.C.	466	944	1,768	3,403
E.N.C. ....	901	929	939	1,288	Ark.	148	388	900	972
Ohio....	16	9	2	249	La.	—	—	—	76
Ind. ....	37	31	94	315	Okla.	74	165	433	1,061
Ill. ....	54	42	38	206	Tex.	245	391	434	1,294
Mich....	399	419	389	290	Mt.	2,286	4,621	6,095	26,923
Wis....	396	427	416	228	Mont.	427	1,235	1,512	6,269
W.N.C. ....	629	1,594	2,726	4,804	Idaho.	441	1,251	1,251	12,422
Minn....	181	186	169	397	Wy.	79	189	223	1,273
Iowa....	137	136	133	345	Colo.	92	253	314	1,785
Mo. ....	151	293	392	2,025	N. Mex.	25	25	24	154
N. Dak. ....	—	400	400	195	Ariz.	541	980	1,882	3,690
S. Dak. ....	11	333	1,392	303	Utah.	94	100	207	1,321
Nebr. ....	142	240	238	1,036	Nev.	587	587	682	9
Kans....	6	6	2	303	Pac.	<sup>2</sup> 5,979	13,578	21,122	72,268
S.A. ....	2,767	3,773	5,255	9,716	Wash.	2,591	7,002	11,144	22,734
Del. ....	1	1	—	—	Oreg.	783	2,434	3,500	5,633
Md. ....	272	272	494	163	Calif.	2,606	4,054	6,350	11,355
D.C. ....	3	3	3	—	Alaska	(NA)	67	79	32,511
Va. ....	207	416	724	1,488	Hawaii	(NA)	21	19	35

- Represents zero. NA. Not available.

<sup>1</sup> Electric utilities and industrial plants, excluding pumped storage capacity. <sup>2</sup> Excludes Alaska and Hawaii.

Source: Federal Power Commission; annual summaries and related monthly reports.

No. 790. GAS UTILITY AND PIPELINE INDUSTRY—BALANCE SHEET AND INCOME ACCOUNT: 1940 TO 1968

[In millions of dollars. Excludes Hawaii through 1955 and Alaska through 1960. Represents privately owned companies. Excludes operations of companies distributing gas in bottles or in tanks]

ITEM	1940	1945	1950	1955	1960	1965	1967	1968
<b>COMPOSITE BALANCE SHEET</b>								
<b>Assets and other debits</b>	<b>4,980</b>	<b>5,610</b>	<b>9,010</b>	<b>15,435</b>	<b>24,570</b>	<b>32,845</b>	<b>37,620</b>	<b>40,245</b>
Utility plant and adjustments	4,380	4,770	7,620	13,305	20,835	28,205	32,030	34,400
Investment and fund accounts	200	185	360	525	1,380	1,885	2,385	2,455
Current and accrued assets	360	590	970	1,465	2,185	2,545	2,965	3,120
Deferred debits	90	65	60	140	170	210	240	270
<b>Liabilities and other credits</b>	<b>4,980</b>	<b>5,610</b>	<b>9,010</b>	<b>15,435</b>	<b>24,570</b>	<b>32,845</b>	<b>37,620</b>	<b>40,245</b>
Capital stock	1,740	1,705	2,405	3,905	5,785	7,115	7,740	7,905
Long-term debt	1,575	1,495	3,145	5,900	9,130	11,515	12,770	13,610
Current and accrued liabilities	245	350	735	1,390	2,420	3,035	3,890	4,325
Reserve for depreciation, retirements, depletion, etc.	870	1,400	1,740	2,775	4,570	7,205	8,535	9,310
Reserve for deferred income taxes	—	—	—	(2)	350	660	700	725
Capital surplus	(NA)	120	135	200	145	175	145	210
Retained income	(NA)	375	720	1,040	1,880	2,715	3,295	3,595
Other liabilities and credits	550	165	130	225	290	425	545	565
<b>COMPOSITE INCOME ACCOUNT</b>								
Operating revenues	1,054	1,363	2,553	5,063	8,696	11,525	12,850	13,770
Net operating revenues	215	211	371	665	1,109	1,462	1,654	1,702
Utility operating income	214	211	372	667	1,112	1,469	1,662	1,710
Gross income	223	226	405	715	1,222	1,628	1,925	2,000
Net income	145	152	317	509	830	1,107	1,300	1,312

— Represents zero. NA Not available. Z Less than \$500,000.

<sup>1</sup> Includes capital stock discount and expense and reacquired securities. Beginning 1960, reacquired securities are deducted from the appropriate capital account. <sup>2</sup> Included in "Other liabilities and credits."

Source: American Gas Association, Inc., New York, N.Y.; yearbook, *Gas Facts*. (Copyright.)

No. 791. GAS UTILITY INDUSTRY, SUMMARY, 1950 TO 1969 AND PROJECTIONS, 1975

[Excludes Hawaii through 1955 and Alaska through 1960. Covers natural, manufactured, mixed, and liquid petroleum gas. Based on questionnaire mailed to all privately owned gas utilities and municipally owned gas departments in the United States, except those with annual revenues less than \$25,000, which in the aggregate account for only a negligible portion of the industry]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969 (proj.)	1975
<b>Customers</b>	<b>1,000</b>	<b>24,001</b>	<b>28,479</b>	<b>33,054</b>	<b>37,338</b>	<b>38,228</b>	<b>39,077</b>	<b>39,930</b>	<b>40,777</b>
Residential	22,146	26,283	30,418	34,341	35,142	35,915	36,691	37,473	42,649
Commercial	1,739	2,048	2,458	2,790	2,868	2,934	3,004	3,063	3,575
Industrial	99	121	141	166	174	181	188	192	230
Other	17	28	37	41	45	47	47	49	58
<b>Sales</b>	<b>mil. therms</b>	<b>42,090</b>	<b>66,586</b>	<b>92,876</b>	<b>119,803</b>	<b>128,591</b>	<b>134,883</b>	<b>144,724</b>	<b>155,611</b>
Residential	13,839	22,387	31,881	39,990	41,754	43,653	45,527	48,007	60,223
Commercial	4,104	6,029	9,198	13,448	14,628	15,776	17,049	18,577	29,585
Industrial	22,887	35,351	47,094	61,465	66,583	70,143	75,951	83,144	113,916
Other	1,261	2,819	4,704	4,900	5,676	5,311	6,197	5,783	7,919
<b>Revenues</b>	<b>mil. dol.</b>	<b>1,948</b>	<b>3,450</b>	<b>5,617</b>	<b>7,407</b>	<b>7,870</b>	<b>8,261</b>	<b>8,781</b>	<b>9,441</b>
Residential	1,177	2,007	3,177	4,030	4,195	4,383	4,587	4,847	(NA)
Commercial	266	424	723	1,054	1,135	1,224	1,315	1,447	(NA)
Industrial	480	938	1,563	2,148	2,335	2,461	2,675	2,932	(NA)
Other	26	81	153	176	205	193	223	215	(NA)
<b>Mileage of gas mains</b>	<b>387,470</b>	<b>496,740</b>	<b>630,950</b>	<b>767,520</b>	<b>799,570</b>	<b>828,270</b>	<b>861,640</b>	<b>893,000</b>	<b>1,109,000</b>
Field and gathering	32,850	45,680	55,850	61,760	62,980	63,710	64,440	66,000	80,000
Transmission	113,050	145,970	183,660	211,240	216,980	225,360	234,450	242,000	291,000
Distribution	241,570	305,090	391,440	494,520	519,610	539,200	562,450	585,000	738,000
<b>Construction expenditures</b>	<b>total</b>	<b>1,198</b>	<b>1,345</b>	<b>1,845</b>	<b>1,935</b>	<b>2,374</b>	<b>2,252</b>	<b>2,972</b>	<b>2,998</b>
Transmission	716	593	848	770	1,038	1,006	1,577	1,569	1,645
Distribution	299	500	696	824	869	848	913	945	1,026
Production and storage	144	198	216	225	333	277	347	343	335
General	39	54	85	116	134	121	135	141	188

NA Not available. <sup>1</sup> Yearly averages. <sup>2</sup> Excludes sales for resale.

<sup>3</sup> A therm is equivalent to 100,000 British thermal units. (A B.t.u. is the quantity of heat required to raise the temperature of 1 pound of water 1° F. at or near its point of maximum density.)

Source: American Gas Association, Inc., New York, N.Y.; yearbook, *Gas Facts*. (Copyright.)

No. 792. GAS UTILITY INDUSTRY—CUSTOMERS, SALES, AND REVENUES, BY TYPE OF GAS, CLASS OF SERVICE, AND STATES: 1968

[See headnote, table 791]

TYPE OF GAS AND STATE	CUSTOMERS <sup>1</sup> (1,000)				SALES (mil. therms) <sup>2</sup>				REVENUES <sup>3</sup> (mil. dol.)			
	Total <sup>4</sup>	Residential	Commercial	Industrial	Total <sup>4</sup>	Residential	Commercial	Industrial	Total <sup>4</sup>	Residential	Commercial	Industrial
U.S.	39,930	36,691	3,004	188	144,724	45,527	17,049	75,951	8,781	4,567	1,315	2,675
Natural	39,278	36,081	2,965	186	143,223	44,682	16,830	75,539	8,647	4,482	1,205	2,648
Manufactured	84	77	7	1	81	46	16	17	15	9	3	3
Mixed	584	502	30	1	1,401	787	197	395	115	73	16	24
L.P.	34	32	3	(Z)	19	12	6	1	4	3	1	(Z)
N.E.	1,661	1,549	100	12	2,087	1,207	366	469	319	219	54	41
Maine	25	24	1	(Z)	16	9	3	4	4	3	1	1
N.H.	42	39	3	(Z)	56	34	10	11	9	6	2	1
Vt.	14	13	1	(Z)	17	7	2	7	2	1	(Z)	(Z)
Mass.	1,035	967	60	7	1,243	762	231	212	196	140	34	19
R.I.	158	147	9	2	216	110	33	70	29	19	5	5
Conn.	388	359	27	3	539	284	87	166	79	50	13	15
M.A.	8,103	7,501	580	30	15,057	7,541	2,127	5,108	1,530	971	241	294
N.Y.	4,128	3,888	266	15	5,494	3,275	871	1,158	637	432	108	80
N.J.	1,721	1,552	163	6	2,497	1,301	435	759	319	210	60	48
Pa.	2,255	2,112	131	9	7,066	2,966	822	3,192	573	329	73	166
E.N.C.	9,113	8,402	661	42	33,449	14,161	5,062	13,755	2,390	1,331	386	650
Ohio	2,551	2,357	181	6	10,192	4,567	1,522	3,849	701	380	110	196
Ind.	1,028	933	91	4	4,269	1,410	551	2,294	274	131	44	97
Ill.	2,851	2,648	187	16	9,407	4,006	1,437	3,915	676	402	106	167
Mich.	1,916	1,758	149	10	6,885	3,215	1,171	2,494	531	308	94	128
Wis.	766	706	54	6	2,696	962	330	1,204	208	109	32	62
W.N.C.	3,341	3,021	295	24	15,559	4,840	2,161	8,131	821	414	139	257
Minn.	616	563	48	5	2,887	924	392	1,513	180	94	29	56
Iowa	602	537	63	2	2,712	874	489	1,256	157	80	32	43
Mo.	1,023	943	75	5	3,709	1,498	554	1,576	219	128	37	52
N. Dak.	52	46	6	(Z)	164	73	68	23	12	7	4	1
S. Dak.	79	69	9	(Z)	273	103	79	86	18	10	5	31
Nebr.	352	304	40	7	1,875	486	266	1,016	88	39	16	31
Kans.	618	559	53	5	3,958	882	314	2,662	146	56	16	72
S.A.	3,312	3,025	263	16	11,158	3,190	1,312	6,452	793	389	125	266
Del.	79	74	5	(Z)	213	73	22	111	20	11	3	6
Md.	683	634	43	4	1,239	663	143	419	138	92	18	28
D.C.	166	146	17	1	250	140	86	9	32	20	10	1
Va.	471	429	39	2	1,116	450	188	428	107	63	20	21
W. Va.	374	341	31	1	1,563	565	182	781	96	47	12	34
N.C.	243	211	29	2	1,085	223	132	716	79	29	14	35
S.C.	199	178	19	1	976	164	92	716	60	21	8	30
Ga.	762	708	54	5	2,786	809	325	1,635	163	81	22	58
Fla.	335	309	26	1	1,931	104	143	1,638	99	24	18	54
E.S.C.	1,853	1,673	165	7	9,013	2,071	1,011	5,490	443	184	67	179
Ky.	552	501	48	1	1,689	792	238	538	108	62	18	23
Tenn.	402	351	46	3	2,260	432	332	1,240	112	38	23	45
Ala.	584	523	39	1	2,687	540	246	1,895	134	57	16	60
Miss.	335	299	33	2	2,378	306	151	1,818	89	26	9	50
W.S.C.	4,621	4,185	396	35	28,488	4,356	1,848	21,340	936	342	94	476
Ark.	401	354	45	3	2,945	461	266	2,195	106	33	14	58
La.	870	804	62	3	6,502	765	256	5,329	194	55	12	122
Okla.	679	611	63	4	2,651	753	354	1,285	113	57	17	32
Tex.	2,672	2,416	226	25	16,391	2,377	973	12,530	523	196	51	264
Mt.	1,745	1,558	176	8	8,037	2,191	1,122	4,385	378	171	66	129
Mont.	146	129	16	1	662	224	146	266	35	17	8	9
Idaho	69	58	10	(Z)	389	67	53	255	25	9	5	10
Wyo.	78	68	10	(Z)	561	120	76	353	20	8	4	9
Colo.	533	470	62	1	2,245	731	473	993	103	50	26	25
N. Mex.	218	194	20	3	1,219	249	102	733	49	21	6	19
Ariz.	408	369	36	2	1,439	283	172	885	73	30	10	30
Utah	232	211	20	1	1,137	455	63	619	50	29	4	17
Nev.	61	58	3	(Z)	386	62	37	282	23	8	3	11
Pac.	6,182	5,778	389	15	21,875	5,970	2,050	10,821	1,172	547	143	383
Wash.	254	222	31	1	1,405	270	165	967	88	35	18	36
Oreg.	183	161	21	1	806	160	83	562	57	23	11	23
Calif.	5,698	5,353	333	1:	19,536	5,511	1,786	9,221	1,012	433	113	319
Alaska	11	9	1	(Z)	105	20	14	56	8	3	2	3
Hawaii	36	33	2	(Z)	24	9	3	12	7	3	1	3

Z Customers, less than 500; revenues, less than \$500,000.

<sup>1</sup> Averages for the year. <sup>2</sup> For definition, see footnote 3, table 791.

<sup>3</sup> Excludes sales for resale. <sup>4</sup> Includes "Other" service, not shown separately.

<sup>5</sup> Natural gas only.

Source: American Gas Association, Inc., New York, N.Y.; yearbook, *Gas Facts*. (Copyright.)

## Section 20

### Science

This section presents statistics relating to various aspects of scientific and technical activity. Major topics are research and development, training and employment of scientists and engineers, atomic energy, space vehicles, and patents and trademarks. Principal sources of these data are the National Science Foundation, the Atomic Energy Commission, and the National Aeronautics and Space Administration.

The National Science Foundation gathers data chiefly through recurring statistical surveys and the National Register of Scientific and Technical Personnel (see below). Current Foundation publications containing data on funds for research and development and on scientific and engineering personnel include the bulletin series, *Reviews of Data on Science Resources*; the regular reports, *Federal Funds for Research, Development, and Other Scientific Activities*; *Research and Development in Industry*, and *American Science Manpower*; occasional reports relating to colleges and universities, and other nonprofit institutions; special reports such as *Scientific Manpower From Abroad*; and policy reports relating to national allocation of manpower and funds to science and technology. Statistical surveys in these areas pose particularly difficult problems of concept and definition and the data should, therefore, be regarded as broad estimates rather than precise quantitative statements. Detailed discussions of the scope and limitations of the data appear in the source publications.

Neither the National Aeronautics and Space Administration nor the Atomic Energy Commission publish any statistical reports as such. NASA's *Semiannual Report* contains current data on finances and its biweekly *Satellite Situation Report* presents information on artificial satellites, including both objects in orbit and decayed objects. The Atomic Energy Commission's *Annual Report to Congress* contains data on atomic energy, equipment, finances, and licenses.

Other sources of statistics on scientific and technical activities include *The Budget of the United States Government*, which contains summary financial data on all Federal research and development programs; the report series *Resources for Medical Research*, issued by the Public Health Service of the Department of Health, Education, and Welfare, and designed to present timely information on funds, manpower, facilities, and institutions devoted to medical and health-related research; and the *Annual Report of the Commissioner of Patents*, issued by the Department of Commerce's Patent Office and presenting data on patent applications and issuances and on trademark registrations and renewals.

**Research and development.**—The National Science Foundation defines research as a "systematic and intensive study directed toward a fuller knowledge of the subject studied" and development as "the systematic use of scientific knowledge directed toward the production of useful materials, devices, systems, methods, or processes." The data on funds are presented within the framework of a national economic structure composed of four sectors: (1) The *government sector*, made up primarily of Federal executive agencies; (2) the *industry sector*, consisting of manufacturing and nonmanufacturing firms and the Federally Funded Research and Development Centers they administer; (3) the *colleges and universities sector*, composed of colleges, universities, and their affiliated institutions, agricultural experiment stations and associated schools of agriculture, and Federally Funded Research and Development Centers administered by educational institutions; and (4) the *other nonprofit institutions sector*, consisting of such organizations as private philanthropic foundations, nonprofit research insti-

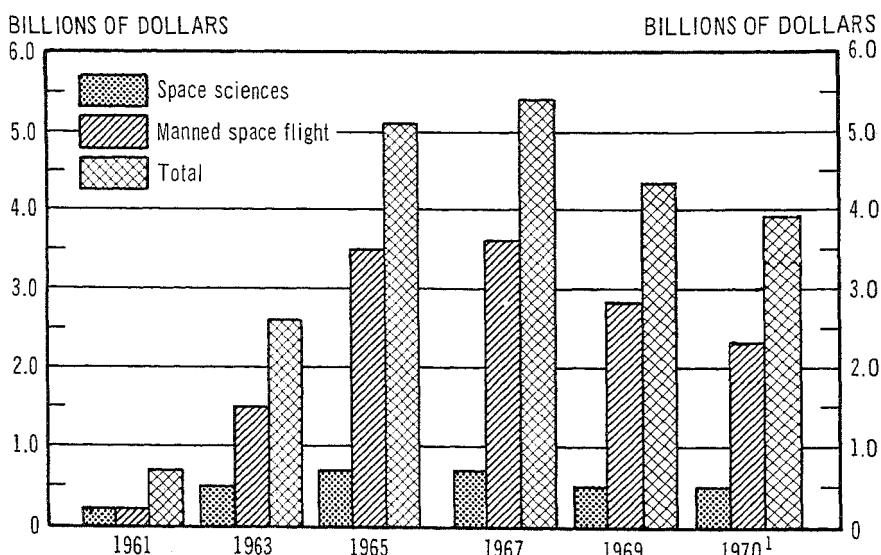
tutes, voluntary health agencies, and Federally Funded Research and Development Centers administered by nonprofit organizations. The federally funded centers are research and development organizations which are exclusively or substantially financed by the Federal government and which, in most instances, were originally established to meet a particular research and development need of the Government. They are administered on a contractual basis, by companies, educational institutions, or other nonprofit organizations. The research and development funds reported consist of current operating costs, including those for planning and administration, except as otherwise noted. They exclude funds for routine testing, mapping and surveying, collection of general-purpose data, dissemination of scientific information, and training of scientific manpower.

**Scientists, engineers, and technicians.**—Scientists and engineers are defined as persons engaged in scientific and engineering work at a level requiring a knowledge of sciences equivalent at least to that acquired through completion of a 4-year college course. They are generally classified according to the fields of their employment and not according to the discipline in which they received their major training. Technicians are defined as persons engaged in technical work at a level requiring knowledge acquired through a technical institute, junior college, or other type of training less extensive than 4-year college training. Craftsmen and skilled workers are excluded. The National Register of Scientific and Technical Personnel is a comprehensive program, conducted by the National Science Foundation, for the voluntary registration of scientists. Because it is voluntary, the Register does not include all scientists and engineers in the United States but it does provide valuable statistical information on demographic and other characteristics not available elsewhere.

**Historical statistics.**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1957*. See preface.

FIG. XXXIII. NASA EXPENDITURES FOR RESEARCH AND DEVELOPMENT: 1961 TO 1970

[See table S19]



<sup>1</sup> Estimated.

Source: Chart prepared by Dept. of Commerce, Bureau of the Census. Data from Bureau of the Budget.

# Research and Development

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## No. 793. FUNDS FOR PERFORMANCE OF RESEARCH AND DEVELOPMENT AND BASIC RESEARCH, BY SECTOR, DISTRIBUTED BY SOURCE: 1955 TO 1970

**[In millions of dollars.** Data primarily on calendar year basis—data for calendar year 1955 for industry and other nonprofit institutions combined with Federal and university data for fiscal 1955 (1954-55); same pattern followed for subsequent years. Data refer, in general, to natural sciences including engineering and to social sciences in all but industry sector. Major portion of funds excludes capital expenditures for research and development. Expenditures at associated Federally Funded Research and Development Centers administered by industry and other nonprofit institutions included in totals of respective sectors]

PERFORMANCE SECTOR AND SOURCE OF FUNDS	1955	1960	1964	1965	1966	1967	1968 (prel.)	1969 est.	1970 est.
<b>Total research and development<sup>1</sup></b>	<b>6,279</b>	<b>13,730</b>	<b>19,215</b>	<b>20,449</b>	<b>22,285</b>	<b>23,680</b>	<b>25,330</b>	<b>26,250</b>	<b>27,250</b>
Federal Government	905	1,726	2,838	3,093	3,222	3,395	3,493	3,550	3,650
Industry	4,640	10,509	13,512	14,185	15,548	16,420	17,600	18,500	19,250
Federal funds	2,180	6,081	7,720	7,740	8,332	8,388	8,600	8,500	8,500
Industry funds	2,460	4,428	5,792	6,445	7,216	8,032	9,000	10,000	10,750
Universities and colleges	409	825	1,595	1,822	2,085	2,329	2,600	2,550	2,675
Federal funds	169	405	916	1,073	1,262	1,409	1,575	1,475	1,525
Industry funds	25	40	41	41	42	48	55	55	60
University and college funds <sup>2</sup>	185	328	555	615	673	753	840	885	950
Other nonprofit institutions funds <sup>2</sup>	30	52	83	93	108	119	130	135	140
Universities and colleges associated Federally Funded R and D Centers	180	360	629	629	630	673	717	710	725
Other nonprofit institutions	145	310	641	720	800	863	920	940	950
Federal funds	75	180	440	490	540	586	620	620	600
Industry funds	28	40	51	55	60	65	70	75	85
Other nonprofit institutions funds <sup>3</sup>	42	90	150	175	200	212	230	245	265
<b>Total basic research</b>	<b>608</b>	<b>1,326</b>	<b>2,560</b>	<b>2,858</b>	<b>3,135</b>	<b>3,422</b>	<b>3,730</b>	<b>3,730</b>	<b>3,935</b>
Federal Government	90	160	364	424	449	478	515	525	555
Industry	189	376	549	592	624	655	680	700	750
Federal funds	27	79	165	186	173	202	210	210	225
Industry funds	162	297	384	406	451	453	470	490	525
Universities and colleges	237	576	1,261	1,419	1,601	1,755	1,990	1,950	2,050
Federal funds	103	299	767	879	1,009	1,124	1,255	1,180	1,220
Industry funds	16	24	25	26	27	31	35	35	40
University and college funds <sup>2</sup>	99	215	402	445	494	551	615	645	700
Other nonprofit institutions funds <sup>2</sup>	19	38	67	69	71	79	85	90	90
Universities and colleges, associated Federally Funded R and D Centers	49	97	191	208	227	250	275	280	300
Other nonprofit institutions	43	117	195	215	234	254	270	275	280
Federal funds	17	58	106	118	130	142	150	150	145
Industry funds	5	10	16	17	18	19	20	20	20
Other nonprofit institutions funds <sup>3</sup>	21	49	73	80	86	93	100	105	115

<sup>1</sup> Comprises basic research, applied research, and development. <sup>2</sup> Includes State and local government funds received by these institutions and used for research and development.

<sup>3</sup> Comprises estimates for independent nonprofit hospitals and voluntary health agencies.

## No. 794. RESEARCH AND DEVELOPMENT—DEFENSE, SPACE, AND OTHER RELATED OUTLAYS: 1955 TO 1970

**[Includes basic research, applied research, and development. Defense related outlays comprise all research and development spending by Dept. of Defense including space activities, and a portion of Atomic Energy Commission funds. Space related outlays are those of the National Aeronautics and Space Administration; they exclude space activities of other Federal agencies, estimated at less than 5 percent of all space research and development spending]**

YEAR	Total research and development (mil. dol.)	PERCENT OF TOTAL RESEARCH AND DEVELOPMENT					
		Defense-space related			Other outlays		
		Total	Defense	Space	Total	Non-federal	Federal
1955	6,279	48.4	47.4	1.0	51.6	44.1	7.5
1956	8,483	49.5	48.6	0.9	50.5	42.7	7.7
1957	9,912	53.2	52.2	1.0	46.8	38.3	8.5
1958	10,870	53.0	52.0	1.0	47.0	37.5	9.5
1959	12,540	55.8	53.3	2.5	44.2	35.7	8.5
1960	13,730	54.7	51.6	3.1	45.3	36.3	9.0
1961	14,552	54.7	49.2	5.5	45.3	36.3	9.0
1962	15,665	53.4	44.6	8.8	46.6	36.6	10.0
1963	17,371	54.9	40.2	14.7	45.1	35.4	9.7
1964	19,215	55.6	36.0	19.6	44.4	34.7	9.7
1965	20,449	53.6	32.0	21.6	46.4	36.3	10.1
1966	22,285	51.6	30.9	20.7	48.4	37.2	11.2
1967	23,680	49.6	31.6	18.0	50.4	39.0	11.4
1968 (prel.)	25,330	47.4	30.7	16.7	52.6	40.8	11.8
1969 est.	26,250	44.5	30.7	13.8	55.5	43.4	12.1
1970 est.	27,250	43.2	30.5	12.7	56.8	45.0	11.9

Source of tables 793-794: National Science Foundation; *National Patterns of R & D Resources—Funds and Manpower in the United States, 1955-70* (NSF 69-30).

**No. 795. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT: 1960 TO 1970**

[In millions of dollars. For years ending June 30. Excludes research and development plant. For any given year, obligations differ from expenditures (see table 796) because not all funds are expended during year obligated]

ITEM	1960	1963	1964	1965	1966	1967	1968	1969	1970 est.
Total R and D	7,552	12,495	14,225	14,614	15,320	16,529	15,921	15,483	15,630
Basic research	610	1,389	1,567	1,690	1,844	2,015	2,104	2,198	2,040
Applied research	1,331	2,652	2,898	3,164	3,427	3,258	3,261	3,198	5,540
Development	5,611	8,454	9,761	9,760	10,050	11,256	10,557	10,285	10,000
Total research	1,941	4,040	4,464	4,854	5,271	5,273	5,365	5,198	5,540
Life sciences	511	922	1,045	1,167	1,301	1,451	1,537	(N.A.)	(N.A.)
Psychological sciences	38	72	95	103	100	108	98	(N.A.)	(N.A.)
Physical sciences	608	1,339	1,602	1,705	1,830	1,074	1,131	(N.A.)	(N.A.)
Environmental sciences	(1)	(1)	(1)	(1)	(1)	670	663	(N.A.)	(N.A.)
Mathematical sciences	25	87	93	105	123	130	119	(N.A.)	(N.A.)
Engineering sciences	690	1,445	1,450	1,576	1,677	1,555	1,569	(N.A.)	(N.A.)
Social sciences	35	80	102	127	166	189	195	(N.A.)	(N.A.)
Other sciences	38	97	77	70	74	95	52	(N.A.)	(N.A.)

NA Not available. <sup>1</sup> Included in "physical sciences."

**No. 796. FEDERAL EXPENDITURES FOR RESEARCH AND DEVELOPMENT, AND RESEARCH AND DEVELOPMENT PLANT, BY AGENCY: 1960 TO 1970**

[In millions of dollars. For years ending June 30. Includes social science research. Expenditure data in this table differ from those in table 793 because of the difference between Federal fiscal year reports and predominantly calendar year reporting by other sectors. See also *Historical Statistics, Colonial Times to 1957*, series W 79-94]

AGENCY	RESEARCH AND DEVELOPMENT					RESEARCH AND DEVELOPMENT PLANT					
	1960	1965	1968	1969	1970 est.	1960	1965	1968	1969	1970 est.	
	Total	7,283	13,804	16,306	15,532	15,192	461	1,084	724	677	696
Departments:											
Agriculture	121	200	263	272	279	11	6	24	15	15	15
Commerce	30	58	75	73	79	3	28	6	3	5	5
Defense	5,553	6,628	7,990	7,642	7,516	101	100	174	208	187	
Army	1,066	1,409	1,495	1,569	1,699	43	20	44	32	30	
Navy	1,277	1,397	2,053	2,080	2,188	24	22	51	29	30	
Air Force	2,958	3,360	3,927	3,514	3,196	20	45	61	113	90	
Other	232	462	515	479	433	15	12	18	34	37	
Health, Educ., and Welfare	292	681	1,217	1,175	1,265	32	57	67	46	58	
National Institutes of Health	256	555	875	850	878	31	40	65	44	51	
Interior	63	109	178	197	217	2	10	17	16	37	
Atomic Energy Commission <sup>1</sup>	762	1,241	1,369	1,406	1,347	224	279	225	248	276	
National Aero. and Space Admin.	330	4,555	4,590	4,182	3,820	71	538	134	70	63	
National Science Foundation	57	150	280	299	7	57	67	62	42		
All other	75	182	376	305	364	10	9	10	9	13	

<sup>1</sup> Data represent accrued costs rather than expenditures.

Source of tables 795 and 796: National Science Foundation; annual report, *Federal Funds for Research, Development, and Other Scientific Activities*, Vol. XVIII, NSF 69-31, and Bureau of the Budget, *Budget of the United States Government*, 1971, Special Analysis Q, *Federal Research Development and Related Programs*.

**No. 797. FUNDS FOR PERFORMANCE OF INDUSTRIAL RESEARCH AND DEVELOPMENT, BY CHARACTER OF WORK, 1960 TO 1968, AND BY INDUSTRY, 1968**

[In millions of dollars. Includes performance of Federally Funded Research and Development Centers administered by industrial firms, classified by industry of the administering company. Excludes performance by certain industry-oriented organizations, such as trade associations, that account annually for less than 1 percent of the total. Excludes funds for research and development capital and the social sciences]

YEAR AND INDUSTRY	Total	RESEARCH			Development
		Total	Basic	Applied	
1960	10,509	2,405	376	2,029	8,104
1964	13,512	3,149	549	2,600	10,362
1965	14,185	3,250	592	2,658	10,934
1966	15,548	3,467	624	2,843	12,081
1967	16,430	3,544	629	2,915	12,886
1968	17,449	3,708	642	3,066	13,741
Chemicals and allied products	1,640	814	205	609	826
Petroleum refining and extraction <sup>1</sup>	538	258	38	220	280
Electrical equipment and communication <sup>2</sup>	4,038	688	133	555	3,340
Aircraft and missiles	5,651	740	67	673	4,912
All other	5,582	1,208	199	1,009	4,374

<sup>1</sup> Excludes geological and geophysical exploration activities of petroleum companies.

<sup>2</sup> These 2 industries have been combined because of the similarity of their research and development activities.

Source: National Science Foundation; annual report, *Research and Development in Industry*.

No. 798. FUNDS FOR PERFORMANCE OF INDUSTRIAL RESEARCH AND DEVELOPMENT, BY INDUSTRY AND SOURCE OF FUNDS: 1963 TO 1968

[In millions of dollars. Covers basic research, applied research, and development. See headnote, table 797.]

INDUSTRY	TOTAL FUNDS				FEDERAL FUNDS			PRIVATE INDUSTRY FUNDS		
	1963	1965	1967	1968	1963	1965	1967	1968	1965	1967
Total	12,630	14,185	16,430	17,449	7,270	7,740	8,395	8,559	5,360	6,446
Food and kindred products	130	151	165	173	(N.A.)	1	(N.A.)	1	(N.A.)	164
Textiles and apparel	30	38	57	59	(N.A.)	2	(N.A.)	1	(N.A.)	172
Lumber, wood products, and furniture	11	12	14	17	(N.A.)	—	(N.A.)	—	(N.A.)	14
Paper and allied products	69	77	83	91	(N.A.)	—	(N.A.)	—	(N.A.)	17
Chemicals and allied products	1,230	1,390	1,669	1,640	234	191	211	201	1,004	77
Petroleum refining and extraction	317	434	455	538	21	69	46	75	296	364
Rubber products	156	166	200	229	46	25	35	41	111	141
Stone, clay, and glass products	100	117	156	167	3	4	7	5	97	165
Primary metals	183	213	242	253	10	8	8	9	113	149
Fabricated metal products	153	145	163	173	24	15	13	11	174	205
Machinery	938	1,128	1,457	1,619	250	267	391	421	709	129
Electrical equipment and communication	2,866	3,168	3,798	4,038	1,849	1,963	2,246	2,272	1,017	1,206
Motor vehicles and other transportation equipment	1,090	1,223	1,376	1,530	291	325	414	389	808	986
Aircraft and missiles	4,712	5,098	5,570	5,651	4,261	4,476	4,499	4,563	452	692
Professional and scientific instruments	284	383	492	635	81	126	172	214	202	257
Other industries 1	330	443	635	680	193	267	375	387	176	260

<sup>1</sup> Represents zero.

<sup>2</sup> Includes data for all other manufacturing and nonmanufacturing industries not specifically listed.

<sup>3</sup> Excludes industry data specified as not available.

Source: National Science Foundation; annual report, *Research and Development in Industry*.

No. 799. INDUSTRIAL RESEARCH AND DEVELOPMENT, BY GEOGRAPHIC DIVISION: 1968  
 [Amounts in millions of dollars. See headnote, table 797. For States in each division, see fig. I, p. xii]

GEOGRAPHIC DIVISION	TOTAL FUNDS		FEDERAL FUNDS		COMPANY FUNDS	
	Amount	Percent	Amount	Percent	Amount	Percent
			17,435	100	8,559	100
United States.....	17,435	100	8,559	100	8,876	100
New England.....	1,899	10	943	11	956	11
Middle Atlantic.....	4,030	23	1,652	19	2,378	27
East North Central.....	3,318	19	436	5	2,882	32
West North Central.....	496	3	128	1	368	4
South Atlantic.....	1,287	7	817	10	470	5
East South Central.....	446	3	263	3	183	2
West South Central.....	821	5	503	6	318	4
Mountain.....	523	3	361	4	182	2
Pacific.....	4,611	26	3,453	40	1,158	13

Source: National Science Foundation; annual report, *Research and Development in Industry*.

No. 800. FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES: 1965 TO 1969  
 [Money figures in millions of dollars. For years ending June 30. R and D = research and development]

YEAR	FEDERAL OBLIGATIONS		ACADEMIC SCIENCE OBLIGATIONS					NON-SCIENCE ACTIVITIES	
	Total	Percent annual increase	Total	Percent of Federal	R and D	R and D plant	Other activities	Total	Percent of Federal
1965.....	2,305.5	41.9	1,816.2	78.8	1,095.0	126.2	595.0	489.3	21.2
1966.....	3,010.0	30.6	2,163.5	71.9	1,252.1	114.8	796.6	846.4	28.1
1967.....	3,311.1	10.0	2,323.8	70.2	1,324.1	116.7	883.0	987.3	29.8
1968.....	3,379.7	2.1	2,349.8	69.5	1,423.0	104.1	822.7	1,029.9	30.5
1969 (prel.).....	3,461.5	2.4	2,369.6	68.5	1,501.5	57.4	810.8	1,091.9	31.5

Source: National Science Foundation; annual report, *Federal Support to Universities and Colleges*.

No. 801. EXPENDITURES FOR SCIENTIFIC PURPOSES—UNIVERSITIES AND COLLEGES AND UNIVERSITY-ADMINISTERED FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS: 1964, 1966, AND 1968  
 [In millions of dollars. "N.e.c." means not elsewhere classified]

TYPE OF EXPENDITURE	UNIVERSITIES AND COLLEGES			FEDERALLY FUNDED RESEARCH AND DEVELOPMENT CENTERS			
	1964	1966	1968	1964	1966	1968	
	Total.....	3,959	5,129	6,957	776	777	855
Current research and development expenditures.....	1,1595	1,2085	1,2599	629	630	719	
Source of funds:							
Federal Government.....	917	1,261	1,572	629	629	715	
State and local governments.....	173	204	225	(z)	(z)	(z)	
Foundations and voluntary health agencies.....	61	77	95	-	-	1	
Industry.....	40	42	55	-	-	(z)	
Institutions' own funds and other sources.....	403	501	651	(z)	(z)	2	
Character of work:							
Basic research.....	1,261	1,601	2,011	191	227	276	
Applied research.....	294	400	492	202	207	231	
Development.....	40	84	95	236	196	212	
Field of science <sup>2</sup> :	1,554	2,001	2,503	393	434	507	
Engineering.....	199	280	334	39	55	75	
Physical sciences.....	256	333	363	278	298	334	
Environmental sciences <sup>3</sup> .....	63	76	135	20	24	20	
Mathematics.....	48	61	79	19	23	18	
Life sciences.....	795	981	1,169	31	27	27	
Psychology.....	44	55	77	4	4	5	
Social sciences <sup>4</sup> .....	125	168	247	2	3	9	
Other sciences, n.e.c. ....	24	46	97	-	-	17	
Current expenditures for instruction <sup>5</sup> .....	1,835	2,377	3,288	-	-	-	
Capital expenditures for research, development, and instruction.....	529	667	1,071	147	147	136	

<sup>1</sup> Represents zero. <sup>2</sup> Less than \$500,000.

<sup>1</sup> Includes estimates for departmental research and for other research and development costs for which most universities and colleges do not maintain separate records. <sup>2</sup> Excludes development expenditures not requested by field of science. <sup>3</sup> Termed "earth sciences" in 1964 and 1966. <sup>4</sup> Includes anthropology, economics, history, linguistics, political science, sociology, and social sciences, n.e.c. <sup>5</sup> Excludes departmental research expenditures which are included with current research and development expenditures.

Source: National Science Foundation. Data derived from the 1964, 1966, and 1969 Surveys of Scientific Activities of Institutions of Higher Education.

**No. 802. SCIENTISTS, ENGINEERS, AND TECHNICIANS IN PRIVATE INDUSTRY, BY FIELD OF EMPLOYMENT, 1961 TO 1967, AND BY INDUSTRY, 1967**

[As of January. Excludes psychologists and social scientists. 1967 data are preliminary]

YEAR AND INDUSTRY	Total <sup>1</sup>	Engineers	Mathematicians	Chemists	Physicists	Metalurgists	Earth scientists	Life scientists	Technicians
1961.....	1,356,900	641,500	15,100	70,800	13,800	12,300	12,000	18,700	570,000
1965.....	1,564,600	748,700	25,000	81,300	14,200	10,400	13,800	20,400	646,500
1966.....	1,627,800	776,100	27,200	84,300	15,100	11,000	13,800	22,400	673,200
Total, 1967.....	1,747,800	824,000	31,300	85,200	16,200	12,000	16,400	22,400	734,700
Ordnance and accessories.....	81,800	51,900	3,800	1,600	2,500	500	200	300	20,900
Chemicals and allied prod.....	140,200	42,500	1,400	40,500	2,100	800	100	11,200	40,800
Petroleum refining.....	20,900	10,700	200	3,300	100	(Z)	300	(Z)	6,200
Primary and fabricated metal products.....	105,000	50,600	1,000	3,200	400	5,000	100	100	44,000
Machinery.....	166,400	81,500	3,200	1,800	600	1,200	(Z)	200	77,800
Communications and equip.....	115,600	68,100	1,900	600	1,300	200	(Z)	100	42,900
Other electrical equipment.....	141,200	73,800	1,400	2,000	1,600	400	100	100	61,500
Aircraft and parts.....	131,600	84,500	3,600	2,100	1,400	1,500	(Z)	200	38,200
Motor vehicles and equip.....	50,300	29,300	500	800	200	500	(Z)	(Z)	18,800
Instruments and related products.....	60,600	32,400	500	3,500	1,000	100	(Z)	200	22,500
Other manufacturing.....	115,600	52,200	1,300	13,400	500	300	300	3,900	42,300
Mining.....	44,000	17,300	300	1,000	200	400	12,300	100	12,300
Contract construction.....	69,300	43,300	300	(Z)	(Z)	(Z)	(Z)	-	25,700
Trans., public utilities, and other nonmanufacturing.....	206,800	82,500	7,500	4,800	300	100	500	3,200	107,600
Services.....	298,500	103,500	4,400	6,800	4,000	500	2,400	2,800	175,200

- Represents zero. Z Less than 50.

<sup>1</sup> Includes physical scientists not shown separately.

Source: Dept. of Labor, Bureau of Labor Statistics; *Scientific and Technical Personnel in Industry, 1961-1966*, Bulletin No. 1609 and unpublished data.

**No. 803. RESEARCH AND DEVELOPMENT SCIENTISTS AND ENGINEERS—MAN-YEARS AND AVERAGE COST, BY INDUSTRY AND SOURCE OF SUPPORT: 1968**

INDUSTRY	Total	Company	FEDERAL			
			Total	Dept. of Defense	Nat'l Aero. and Space Admin.	All other agencies
Man-years of R and D scientists and engineers.....	379,800	223,300	156,500	104,600	135,000	1 16,900
Chemicals and allied products.....	41,100	37,100	4,000	1,500	(NA)	2,400
Machinery.....	40,800	31,900	8,900	5,400	2,900	600
Electrical equipment and communication.....	98,700	47,600	51,100	34,200	9,500	7,400
Motor veh. and other transportation equip.....	24,300	17,900	6,300	4,000	(NA)	(NA)
Aircraft and missiles.....	98,000	25,900	72,100	50,700	17,600	3,800
Other industries.....	76,900	62,800	14,100	8,800	2,900	2,400
Average cost (per scientist or engineer).....	\$45,900	\$39,800	\$54,700	\$51,800	\$66,000	\$48,800
Chemicals and allied products.....	40,060	38,800	50,600	44,600	(NA)	54,500
Machinery.....	39,700	37,600	47,100	52,200	40,400	32,900
Electrical equipment and communication.....	40,900	37,100	44,600	43,600	44,000	49,200
Motor veh. and other transportation equip.....	63,100	62,200	65,400	76,000	(NA)	(NA)
Aircraft and missiles.....	57,700	44,300	62,500	55,100	87,600	44,500
Other industries.....	38,500	35,100	53,000	55,500	48,300	50,000

NA Not available. <sup>1</sup> Includes data for industries not available separately.

Source: National Science Foundation; annual report, *Research and Development in Industry*.

**No. 804. PROFESSIONAL SCIENTIFIC AND TECHNICAL PERSONNEL IN THE FEDERAL GOVERNMENT, BY OCCUPATIONAL GROUP: 1960 TO 1968**

[1960 to 1962, as of October; thereafter, as of December]

OCCUPATIONAL GROUP	1960	1961	1962	1964	1966	1967	1968
Total.....	153,383	160,732	171,645	186,823	195,397	204,198	206,982
Scientific personnel.....	53,264	60,077	61,982	68,324	72,471	76,010	78,054
Physical sciences.....	17,984	123,573	123,043	26,282	27,323	28,537	29,517
Mathematics and statistics <sup>2</sup> .....	4,983	5,017	5,590	6,549	7,344	8,138	8,858
Biological sciences.....	21,636	22,502	23,666	24,883	26,424	27,167	27,127
Social sciences <sup>3</sup> .....	4,672	4,919	5,479	5,818	6,328	6,854	7,116
Geography and cartography.....	2,300	2,278	2,389	2,949	3,173	3,378	3,403
Psychology.....	1,689	1,788	1,815	1,843	1,879	1,936	2,033
Engineering personnel.....	60,978	1 59,974	1 67,500	74,869	76,832	81,213	82,765
Health professional personnel.....	39,141	40,681	42,163	43,630	46,094	46,975	46,163
Health officers.....	11,138	11,587	11,877	12,340	13,272	13,802	13,583
Other.....	28,003	29,094	30,286	31,290	32,822	33,173	32,580

<sup>1</sup> Because of overlapping in job series classifications, several thousand personnel were transferred from engineering to the physical sciences series in 1961; many of them were transferred back to engineering in 1962.

<sup>2</sup> Includes actuary, mathematics, statistics, operations research, and, beginning 1961, mathematical statisticians.

<sup>3</sup> Includes social science, economics, history, anthropological sciences, and, beginning 1964, urban planning.

Source: National Science Foundation. Compiled from data supplied by Civil Service Commission.

**No. 805. SCIENTISTS AND ENGINEERS—EMPLOYMENT BY TYPE OF INSTITUTION, BY FIELD OF EMPLOYMENT: 1965 AND 1969**

[As of January. Includes full-time and part-time personnel. Excludes graduate students who received stipends for part-time services as scientists or engineers]

FIELD OF EMPLOYMENT	UNIVERSITIES AND COLLEGES		FED. FUNDED R AND D CENTERS		FIELD OF EMPLOYMENT	UNIVERSITIES AND COLLEGES		FED. FUNDED R AND D CENTERS	
	1965	1969	1965	1969		1965	1969	1965	1969
Total <sup>1</sup>	188,470	253,536	11,017	11,502	Mathematicians	13,600	22,812	952	1,091
Engineers <sup>1</sup>	21,953	25,827	4,969	5,050	Life scientists	83,762	102,808	653	424
Aeronautical	1,127	1,371	204	183	Agricultural	14,375	15,338	37	-
Chemical	1,571	1,776	263	293	Biological	24,209	29,499	436	333
Civil	3,145	4,002	180	142	Medical	45,178	57,971	180	91
Electrical	5,628	6,940	2,194	2,185	Psychologists	9,449	14,941	109	173
Mechanical	4,255	4,896	1,311	1,459	Social scientists <sup>1</sup>	32,603	52,869	75	349
Physical scientists <sup>1</sup>	26,048	34,279	4,247	4,415	Economists	7,932	10,498	4	45
Chemists	10,991	14,511	1,254	1,270	Sociologists	6,261	9,472	13	33
Earth scientists	4,105	5,609	152	85	Political scientists	5,919	7,966	13	17
Physicists	9,439	11,932	2,357	2,673	Historians	(NA)	14,460	(NA)	12

- Represents zero. NA Not available. <sup>1</sup> Includes other engineers or scientists not shown separately.

Source: National Science Foundation. Data derived from the 1964, 1966, and 1969 Surveys of Scientific Activities of Institutions of Higher Education.

**No. 806. SCIENTIFIC AND TECHNICAL PERSONNEL IN STATE GOVERNMENT AGENCIES—TOTAL, 1964 AND 1967, AND SELECTED STATES, 1967**

YEAR AND STATE	Sci- entists	Engi- neers	Health- related profes- sionals	Social work- ers	Tech- ni- cians	STATE	Sci- entists	Engi- neers	Health- related profes- sionals	Social work- ers	Tech- ni- cians
1964	16,686	34,537	36,153	(*)	60,232	Minnesota	439	635	714	312	1,025
Total, 1967	20,617	34,192	40,975	42,801	61,916	New York	1,703	2,869	4,934	2,621	2,959
California	2,426	5,719	8,314	2,347	6,825	North Carolina	684	823	787	593	1,329
Florida	787	847	2,084	1,808	2,578	Ohio	551	681	1,154	724	2,585
Illinois	955	1,504	1,811	2,212	1,317	Oregon	512	778	317	958	372
Maryland	445	259	1,070	1,071	1,276	Pennsylvania	866	1,403	3,335	3,676	3,281
Massachusetts	490	1,295	2,179	570	1,091	Texas	430	1,239	1,046	649	3,481
Michigan	713	902	1,132	2,885	1,396	Virginia	730	971	1,536	289	2,331

<sup>1</sup> Comparable data not available due to change in definition.

Source: Dept. of Labor, Bureau of Labor Statistics; *Scientific and Technical Personnel in State Government Agencies, 1967*.

**No. 807. SCIENTISTS, ENGINEERS, AND PHYSICIANS ADMITTED AS IMMIGRANTS, BY OCCUPATION: 1963 TO 1969**

[For years ending June 30. Includes professors and instructors in each field]

OCCUPATION	1963-1969, total	1963		1964		1965		1966		1967		1968		1969	
		Scientists and engineers	59,996	5,933	5,762	5,345	7,205	12,523	12,973	10,255					
Engineers <sup>1</sup>		41,384	4,014	3,725	3,446	4,915	8,821	9,313	7,150						
Aeronautical		1,331	128	64	69	241	369	334	126						
Chemical		2,945	194	197	163	325	668	602	796						
Civil		4,565	459	422	399	489	840	1,039	917						
Electrical		6,246	656	559	447	680	1,344	1,432	1,128						
Industrial		1,503	142	145	132	169	292	375	248						
Mechanical		5,891	398	419	372	577	1,344	1,580	1,201						
Metallurgical and mining		1,120	110	111	124	139	245	228	163						
Sales		452	52	47	51	57	101	80	55						
Natural scientists <sup>1</sup>		15,857	1,688	1,754	1,597	1,949	3,158	3,110	2,601						
Agricultural scientists <sup>2</sup>		1,329	133	153	181	185	189	179	309						
Biologists and medical scientists		1,699	136	182	173	227	377	328	296						
Chemists		7,446	840	859	718	874	1,392	1,481	1,282						
Geologists, geophysicists		814	87	98	114	98	123	174	120						
Mathematicians <sup>1</sup>		1,588	166	147	114	176	396	351	238						
Physicists		2,408	262	274	232	315	540	494	291						
Social scientists <sup>1</sup>		2,755	231	283	302	341	544	550	504						
Economists		1,371	120	136	174	164	263	265	249						
Psychologists		781	83	98	78	97	143	159	123						
Physicians and surgeons		18,044	2,093	2,249	2,012	2,549	3,325	3,060	2,756						

<sup>1</sup> Includes occupations not shown separately. <sup>2</sup> Includes foresters and conservationists.

<sup>3</sup> Includes statisticians and actuaries.

Source: National Science Foundation; annual report, *Scientists, Engineers, and Physicians from Abroad*. Data from Dept. of Justice, Immigration and Naturalization Service.

## No. 808. SELECTED CHARACTERISTICS OF SCIENTISTS: 1968

[For discussion of coverage, see text, p. 518. For definition of median, see preface]

CHARACTERISTIC	Number	Percent	Median salary	CHARACTERISTIC	Number	Percent	Median salary
Total.....	297,942	100.0	\$13,200	Highest degree:			
Sex:				Ph. D.....	111,206	37.3	\$15,000
Men.....	270,109	90.7	13,500	Professional medical.....	7,455	2.5	20,000
Women.....	27,833	9.3	10,000	Master's.....	86,717	29.1	12,000
Years of professional experience:				Bachelor's.....	89,141	29.9	12,000
1 year or less.....	11,312	3.8	9,000	Less than a bachelor's.....	353	0.1	14,000
2-4 years.....	44,308	14.9	10,000	Not reported.....	3,070	1.0	12,400
5-9 years.....	55,645	18.7	11,700	Age:			
10-14 years.....	42,590	14.3	13,800	20-29 years.....	61,420	20.6	9,500
15-19 years.....	33,352	13.2	15,100	30-39 years.....	98,950	33.2	12,300
20 years or more.....	63,933	21.4	16,800	40-49 years.....	78,498	26.3	15,200
Not reported.....	40,802	13.7	14,000	50-59 years.....	40,410	13.6	16,300
				60 years and over.....	17,717	5.9	16,000
				Not reported.....	947	0.3	11,400

Source: National Science Foundation. Data derived from the National Register of Scientific and Technical Personnel, 1968.

## No. 809. MEDIAN SALARIES IN SELECTED SCIENCE FIELDS: 1964, 1966, AND 1968

[In dollars. Covers full-time employed civilians reporting to the National Register of Scientific and Technical Personnel. For discussion of coverage, see text, p. 518. For definition of median, see preface]

FIELD	1964	1966	1968	FIELD	1964	1966	1968
All fields.....	11,000	12,000	\$13,200	Linguistics.....	9,000	10,000	11,500
Agricultural sciences.....	9,200	10,000	11,000	Mathematics.....	(NA)	(NA)	13,000
Anthropology.....	(NA)	11,500	12,700	Atmospheric and space sciences.....	10,600	11,700	13,400
Biological sciences.....	10,700	12,000	13,000	Physics.....	12,000	12,500	14,000
Chemistry.....	11,000	12,000	13,500	Political science.....	(NA)	(NA)	12,000
Computer sciences.....	(NA)	(NA)	14,100	Psychology.....	10,300	11,500	13,200
Earth and marine sciences.....	10,300	11,400	12,900	Sociology.....	10,100	11,300	12,000
Economics.....	12,000	13,100	15,000	Statistics.....	12,000	12,800	14,900

NA Not available.

Source: National Science Foundation; *Reviews of Data on Science Resources*, Nos. 2, 11, and 16.

## No. 810. SCIENTISTS—NUMBER AND MEDIAN ANNUAL SALARIES, BY TYPE OF EMPLOYER AND WORK ACTIVITY: 1968

[For discussion of coverage, see text, p. 518. For definition of median, see preface]

TYPE OF EMPLOYER	Total	WORK ACTIVITY							
		Research and development		Management or administration		Teach- ing <sup>3</sup>	Pro- duc- tion and in- spec- tion		
		Total <sup>1</sup>	Basic research	Applied research	Total <sup>2</sup>				
All employers, number.....	297,942	96,036	46,177	38,841	62,870	28,568	62,087	16,847	35,115
Educational institutions.....	117,746	38,668	28,818	9,447	10,278	3,680	60,230	250	4,826
Federal Government.....	29,666	12,249	5,664	6,060	10,680	4,668	294	1,087	4,561
Other government.....	10,031	2,588	1,005	1,494	4,044	1,175	291	548	2,242
Military.....	7,155	1,492	739	671	2,506	688	366	205	2,164
Nonprofit organizations.....	11,204	4,970	2,315	2,425	2,921	1,517	218	209	2,523
Industry and business.....	95,776	34,271	6,675	18,034	30,910	16,321	254	14,057	13,720
Self-employed.....	6,462	472	132	284	792	209	59	332	4,434
Other.....	1,729	556	309	201	437	171	167	92	384
No report of employer.....	5,466	770	520	225	302	139	208	67	261
Median salary, employers.....	\$13,200	\$13,400	\$13,000	\$13,800	\$17,000	\$18,400	\$13,000	\$12,000	\$13,000
Educational institutions <sup>3</sup> .....	13,500	12,700	12,000	13,700	18,000	18,900	13,000	10,000	12,400
Federal Government.....	13,500	13,400	13,500	13,000	15,300	18,000	(B)	11,600	12,800
Other government.....	11,200	11,000	11,200	11,000	12,000	12,500	(B)	9,800	10,800
Nonprofit organizations.....	14,700	14,100	13,500	15,000	18,000	20,000	(B)	10,000	12,500
Industry and business.....	14,700	14,000	15,000	14,300	18,000	18,700	(B)	12,000	13,300
Self-employed.....	18,000	16,100	14,400	17,000	16,000	19,000	(B)	15,000	20,000
Other.....	12,600	11,500	10,200	12,300	16,000	16,600	(B)	11,300	12,800
No report of employer.....	14,000	14,000	13,000	14,000	16,500	17,000	(B)	12,000	13,500

<sup>1</sup> Not computed; base too low. <sup>2</sup> Includes development or design, not separately identified.<sup>3</sup> Includes management or administration of activities other than research or development that were not separately identified.

Salaries are computed on a calendar year (11-12 month) basis.

<sup>4</sup> Includes 12,707 not employed and 12,280 not reporting work activity.

Source: National Science Foundation. Data derived from the National Register of Scientific and Technical Personnel, 1968.

## No. 811. SCIENTISTS, BY SCIENTIFIC FIELD, 1962 TO 1968, AND BY STATES AND OTHER AREAS, 1968

[For discussion of coverage, see text, p. 518]

YEAR AND STATE OR OTHER AREA	Total	SCIENTIFIC FIELD								
		Agricultural sciences	Biological sciences	Psychology	Atmospheric and earth sciences <sup>1</sup>	Mathematics and statistics <sup>2</sup>	Physics	Chemistry	Economics	Other social sciences
1962.....	214,940	12,389	25,554	16,791	24,104	18,189	25,725	54,130	(3)	38,058
1964.....	223,854	9,526	27,135	16,804	23,417	20,254	26,698	63,053	12,143	24,824
1966.....	242,763	10,038	29,633	19,027	26,032	25,848	28,130	65,917	13,150	23,988
Total, 1968.....	297,942	12,740	46,183	23,077	29,491	34,088	32,491	93,788	11,510	14,574
Alabama.....	2,519	224	395	144	155	377	295	763	87	79
Alaska.....	651	175	114	15	228	30	31	38	9	11
Arizona.....	2,414	196	420	190	410	273	286	401	91	147
Arkansas.....	1,050	185	236	78	78	74	45	269	49	36
California.....	33,275	1,088	4,790	3,220	3,406	4,966	5,160	8,150	995	1,500
Colorado.....	5,394	369	699	388	1,635	520	621	874	106	182
Connecticut.....	5,321	68	757	459	200	692	762	1,913	185	285
Delaware.....	2,909	23	163	70	43	87	129	2,341	29	24
District of Columbia.....	8,829	250	1,087	595	990	1,245	1,103	1,307	1,391	861
Florida.....	5,244	326	984	526	524	579	513	1,389	168	235
Georgia.....	3,599	426	779	318	225	393	231	880	175	172
Hawaii.....	1,207	74	276	97	202	117	84	195	44	118
Idaho.....	1,206	356	213	65	115	52	104	248	24	29
Illinois.....	15,250	284	2,546	1,314	905	1,588	1,433	5,676	662	842
Indiana.....	6,347	174	1,156	442	290	772	570	2,290	282	371
Iowa.....	3,230	171	752	329	137	352	303	810	179	197
Kansas.....	2,736	136	505	295	378	322	165	675	117	143
Kentucky.....	2,398	144	434	200	195	240	143	809	97	136
Louisiana.....	4,417	242	607	143	1,498	311	180	1,203	98	135
Maine.....	891	120	187	71	65	91	56	211	38	52
Maryland.....	9,628	193	2,333	548	760	1,449	1,468	2,333	194	355
Massachusetts.....	12,137	100	1,807	884	652	1,594	2,307	3,629	478	686
Michigan.....	10,605	400	1,668	963	572	1,113	868	3,903	427	691
Minnesota.....	5,189	332	973	484	267	686	445	1,574	188	240
Mississippi.....	1,258	202	291	73	202	90	55	244	52	49
Missouri.....	5,446	199	1,009	356	505	566	400	1,905	247	259
Montana.....	1,193	354	255	38	219	85	40	140	35	27
Nebraska.....	1,636	151	357	136	225	203	96	305	78	87
Nevada.....	693	89	95	38	181	38	67	134	21	30
New Hampshire.....	978	74	201	61	87	116	125	202	55	57
New Jersey.....	14,004	129	1,263	823	285	1,425	1,474	8,096	208	301
New Mexico.....	2,558	210	266	100	372	335	742	434	42	57
New York.....	31,279	397	4,803	3,325	1,278	4,186	3,724	10,283	1,453	1,820
North Carolina.....	4,499	297	1,028	306	244	480	295	1,370	177	302
North Dakota.....	714	98	175	55	103	59	21	154	30	19
Ohio.....	13,121	192	1,582	1,013	653	1,137	1,371	6,179	433	561
Oklahoma.....	3,731	134	410	174	1,279	293	169	1,109	92	71
Oregon.....	3,445	837	787	254	254	280	194	567	125	187
Pennsylvania.....	16,421	331	2,326	1,390	780	1,709	1,743	6,887	513	742
Rhode Island.....	1,185	31	191	83	82	128	183	387	38	82
South Carolina.....	1,756	197	251	94	88	142	121	754	67	42
South Dakota.....	698	142	173	56	71	64	24	107	33	28
Tennessee.....	4,171	181	728	270	192	348	512	1,625	143	172
Texas.....	14,861	436	1,664	722	4,572	1,417	1,248	4,047	308	447
Utah.....	2,022	186	433	115	377	190	156	438	53	74
Vermont.....	606	59	156	54	40	60	63	109	32	33
Virginia.....	5,789	273	716	391	505	1,011	759	1,645	261	228
Washington.....	5,372	614	985	411	491	577	580	1,301	168	245
West Virginia.....	1,828	139	218	88	112	81	66	1,005	61	58
Wisconsin.....	5,721	332	1,115	455	355	648	489	1,648	253	426
Wyoming.....	854	142	120	41	309	35	37	138	19	13
Other areas.....	571	28	109	36	116	25	36	149	25	47
Foreign.....	5,086	230	595	271	1,584	457	404	565	377	603

<sup>1</sup> Beginning 1968, includes space and marine sciences.<sup>2</sup> Beginning 1968, includes computer science.<sup>3</sup> Economics included in "Other social sciences."

**No. 812. DOCTORATES CONFERRED—TOTAL AND SELECTED SCIENCE FIELDS,  
BY CHARACTERISTICS: 1969**

[Year ending June 30. For definition of median, see preface]

ITEM	All fields total <sup>1</sup>	Physical sciences <sup>2</sup>	Engineering	Life sciences <sup>3</sup>	Psychology	Social sciences <sup>4</sup>
Doctorates conferred.....	25,734	4,964	3,234	4,116	1,728	1,951
Percent.....	100.0	100.0	100.0	100.0	100.0	100.0
Male.....	86.9	94.7	99.7	86.2	76.6	88.1
Female.....	13.1	5.2	.3	13.8	23.4	11.9
U.S. citizens.....	83.5	82.8	73.6	79.5	93.5	79.9
Foreign citizens.....	13.8	15.4	25.0	19.5	5.1	17.6
Citizenship unknown.....	2.7	1.8	1.4	1.0	1.4	2.5
Median age at award.....years	30.8	28.2	29.6	29.7	29.1	31.3
Percent with baccalaureate in same field as doctorate.....	60.2	78.3	87.2	36.4	66.7	49.6
Percent with master's degree.....	78.9	58.2	88.9	69.6	74.8	80.9
Median time lapse from baccalaureate to doctorate:						
Total time.....years	8.0	6.0	7.0	6.8	6.4	8.0
Registered time.....years	5.6	5.3	5.2	5.3	5.5	5.6

<sup>1</sup> Includes arts and humanities, not shown separately.

<sup>2</sup> Includes astronomy, physics, chemistry, earth sciences, and mathematics.

<sup>3</sup> Includes agriculture, forestry, health sciences, and biological sciences.

<sup>4</sup> Includes anthropology, archaeology, sociology, economics, political science, international relations.

Source: National Science Foundation. Data from National Research Council; *Summary Report, 1969 Doctorate Recipients from United States Universities*.

**No. 813. SCIENCE DOCTORATES CONFERRED AND ENROLLMENT FOR ADVANCED DEGREES: 1960 TO 1969**

[Doctorates conferred, years ending June 30; enrollment, as of fall term]

FIELD OF SCIENCE	1960	1963	1964	1965	1966	1967	1968	1969
Science doctorates conferred.....	6,276	8,279	9,311	10,528	11,469	12,981	14,420	15,982
Life sciences <sup>1</sup> .....	1,730	2,076	2,363	2,679	2,869	3,116	3,681	4,116
Agricultural and related.....	343	373	445	480	485	517	581	707
Health sciences.....	69	107	142	145	175	176	195	253
Anatomy, cytology, embryology.....	33	87	105	139	132	160	154	206
Physiology and related fields.....	217	300	356	403	396	470	574	579
Botany and phytopathology.....	188	200	205	240	247	215	285	295
Biochemistry.....	259	300	371	391	446	495	573	547
Microbiology.....	184	210	194	273	286	330	357	380
Zoology and entomology.....	270	272	309	360	395	372	466	457
Psychology.....	773	892	1,013	955	1,133	1,293	1,452	1,728
Physical sciences.....	1,861	2,428	2,527	2,859	3,028	3,478	3,642	3,901
Physics and astronomy.....	531	818	864	1,046	1,049	1,295	1,422	1,452
Chemistry.....	1,077	1,288	1,351	1,439	1,580	1,764	1,782	1,947
Earth sciences.....	253	322	312	374	399	419	483	502
Engineering.....	792	1,357	1,662	2,068	2,283	2,581	2,833	3,234
Mathematics.....	291	484	590	684	766	828	970	1,063
Social sciences, selected.....	829	1,042	1,156	1,283	1,390	1,685	1,842	1,940
Sociology.....	162	211	201	239	258	332	362	402
Economics.....	352	450	526	561	622	700	756	799
Pol. science, pub. admin., int'l rel.	238	290	336	391	401	495	571	559
Anthropology and archeology.....	77	91	93	92	109	158	153	180
School enrollment, all fields.....	314,349	413,366	477,535	535,332	583,000	649,697	703,745	
Science fields.....	120,638	158,051	177,544	195,346	207,049	224,468	234,661	
Agriculture and forestry.....	4,412	5,165	5,622	6,426	6,698	7,308	7,677	
Biological sciences, incl. general programs.....	15,303	21,723	25,165	28,323	30,309	32,648	33,999	
Mathematical subjects <sup>2</sup> .....	11,770	15,974	18,226	21,014	23,150	25,066	26,840	
Physical sciences.....	25,707	30,959	34,061	36,506	37,950	40,447	40,937	
Engineering.....	36,636	48,917	54,318	57,516	58,338	62,633	63,662	
Psychology.....	10,677	12,627	13,733	15,551	16,709	19,064	21,643	
Social sciences.....	16,133	22,686	26,419	30,010	33,895	37,304	39,933	
Health fields.....	5,842	7,322	8,234	8,909	9,839	10,139	11,373	
All other fields.....	187,869	247,993	291,757	331,077	366,112	415,090	457,711	

NA Not available.

<sup>1</sup> Includes fields not shown separately. <sup>2</sup> Beginning 1965, includes computer science.

Source: National Science Foundation. Data from National Research Council, Doctorate Record File; and Dept. of Health, Education, and Welfare, Office of Education; *Enrollment for Masters and Higher Degrees*.

## No. 814. PATENTS AND TRADEMARKS: 1946 TO 1969

[Covers patents issued to citizens of United States and residents of foreign countries. For information on copyrights, see table 772. See also *Historical Statistics, Colonial Times to 1957*, series W 66-75 and W 77-78]

ITEM	1946-50	1951-55	1956-60	1961-65	1960	1965	1967	1968	1969
<b>Patent applications filed</b>	<b>400,342</b>	<b>379,053</b>	<b>410,389</b>	<b>463,193</b>	<b>84,475</b>	<b>100,421</b>	<b>93,011</b>	<b>98,737</b>	<sup>1</sup> <b>107,076</b>
Inventions	360,095	351,649	384,782	436,082	79,590	94,632	87,872	93,136	101,040
Designs	39,127	25,951	23,865	25,251	4,525	5,413	4,744	5,171	5,551
Botanical plants	398	467	584	628	131	105	103	95	111
Reissues	722	986	1,158	1,232	229	271	292	335	364
<b>Patents issued</b>	<b>163,034</b>	<b>208,964</b>	<b>251,872</b>	<b>275,443</b>	<b>49,986</b>	<b>66,647</b>	<b>69,098</b>	<b>62,713</b>	<b>71,229</b>
Inventions	144,076	192,651	237,469	259,971	47,170	62,857	65,652	59,102	67,557
Individuals	58,957	78,459	78,589	69,945	13,069	16,063	15,647	13,555	14,772
Corporations:									
United States	78,376	100,278	133,948	152,537	28,187	37,158	38,353	34,886	38,847
Foreign	4,669	10,537	21,043	30,992	4,670	8,096	9,895	9,172	12,188
U.S. Government	1,761	3,359	5,889	6,497	1,244	1,540	1,757	1,489	1,750
Designs	18,016	15,084	13,024	13,862	2,543	3,424	3,165	3,352	3,335
Botanical plants	334	441	567	576	116	120	85	72	103
Reissues	608	788	812	1,034	157	246	196	187	234
Defensive Publications	-	-	-	-	-	-	-	96	275
<b>Certificates of trademarks issued</b>	<b>85,611</b>	<b>100,942</b>	<b>108,246</b>	<b>106,635</b>	<b>22,367</b>	<b>21,666</b>	<b>23,837</b>	<b>26,174</b>	<b>26,789</b>
Trademarks	61,339	63,311	90,727	91,946	18,424	18,501	20,036	21,528	20,613
Trademark renewals	24,272	17,631	17,519	14,689	3,933	3,165	3,801	4,646	6,176

- Represents zero. <sup>1</sup> New system of recording; includes categories not shown in earlier years.

<sup>2</sup> Patent applications published at request of applicant or owner and identified by distinct seven digit numbers. First Defensive Publication published in November 1968.

Source: Dept. of Commerce, Patent Office; unpublished data. Fiscal-year figures are published in the *Annual Report of the Commissioner of Patents*.

## No. 815. SHIPMENTS OF ATOMIC ENERGY EQUIPMENT AND PRODUCTS: 1967 AND 1968

[In thousands of dollars. Excludes construction expenditures, engineering and design costs, research and development expenditures, and products used in atomic energy which are not uniquely designed for nuclear applications. Excludes radiation detection and monitoring devices and control and measuring devices containing radioactive isotopes]

ITEM	1967			1968		
	Total	U.S. Govern- ment agencies	Other, including exports	Total	U.S. Govern- ment agencies	Other, including exports
				359,261	1 130,621	1 228,640
Total	46,710	(D)	(D)	50,894	(D)	(D)
Nuclear reactors <sup>2</sup>						
Reactor components and equipment:						
Control rod drive mechanisms and components <sup>3</sup>	128,193	22,972	105,221	197,743	24,398	173,345
Heat exchangers and condensers	27,436	10,103	17,333	58,732	19,485	39,297
Pressurizers, components, and auxiliary equipment	6,769	(D)	(D)	16,588	(D)	(D)
Pumps	19,267	7,734	11,533	24,931	7,877	17,054
Valves	8,040	5,538	(D)	13,432	9,632	3,800
Complete reactor fuel elements and control rods shipped directly for installation or use in a reactor	58,897	17,950	(D)	65,743	1,015	(D)
Partially fabricated reactor fuel element materials and control rods not shipped directly for installation or use in a reactor	17,754	6,579	11,175	28,819	12,850	15,969
Reactor moderators, coolants, and reflectors	2,089	1,068	1,021	2,214	1,149	1,065
Other specialized reactors components and equipment	7,697	2,136	5,561	9,521	1,971	7,550
Hot laboratory equipment	2,668	1,500	1,168	2,509	1,800	709
Shieldings	4,501	3,442	1,059	3,223	2,043	1,180
Radioactive isotopes shipped from non-AEC plants producing isotopes						
Radiation sources and other radioactive materials produced from purchased isotopes	8,269	501	7,768	11,193	126	11,067
Receipts for processing of source and special nuclear materials and for commercial irradiation service	14,240	1,538	12,702	16,919	1,554	15,365
	6,731	5,054	1,677	8,050	4,636	3,414

D Withheld to avoid disclosing figures for individual companies.

<sup>1</sup> Includes the value of products for which separate figures are not shown to avoid disclosure.

<sup>2</sup> Includes primary vessels and tanks.

<sup>3</sup> Includes core structural (barrels, cans, boxes, plates, etc.), fuel handling equipment, and accessory instrumentation for reactor control. <sup>4</sup> Atomic Energy Commission only.

Source: Dept. of Commerce, Bureau of the Census; *Current Industrial Reports*, Series MA-38Q.

No. 816. ATOMIC ENERGY COMMISSION—SELECTED DATA ON NUCLEAR REACTORS, URANIUM, RADIOISOTOPES, AND HEAVY WATER: 1960 TO 1969

[For years ending June 30, except as noted]

ITEM	1960	1965	1966	1967	1968	1969
<b>NUCLEAR REACTORS</b>						
Development costs.....	mil. dol.	399	538	489	523	549
Civilian power reactors.....	mil. dol.	100	117	120	141	167
Military reactors.....	mil. dol.	187	116	92	105	124
Space propulsion.....	mil. dol.	15	93	92	86	78
Merchant ship reactors.....	mil. dol.	4	3	—	—	—
Auxiliary power sources.....	mil. dol.	12	105	73	80	63
General.....	mil. dol.	81	104	112	116	117
Electrical generation: <sup>1</sup>						
Capacity..... net electrical megawatts..		396	1,057	1,916	2,838	2,759
Gross output..... 1,000 megawatt hours..		591	4,368	6,583	8,836	13,974
<b>URANIUM</b>						
AEC procurement:						
Quantity..... tons of U <sub>3</sub> O <sub>8</sub> ..		34,582	15,313	12,427	9,979	7,737
Cost..... mil. dol.		704	265	211	165	124
Estimated ore reserves <sup>2</sup> ..... 1,000 tons of contained U <sub>3</sub> O <sub>8</sub> ..		238	145	141	148	161
Rated ore milling capacity <sup>2</sup> ..... 1,000 tons per day..		22	12	13	15	18
<b>RADIOISOTOPES</b>						
Sales by AEC..... \$1,000..		2,209	1,601	1,971	1,528	1,473
Exports (domestic) <sup>1,3</sup> ..... \$1,000..		1,286	3,026	3,779	3,144	3,918
Imports <sup>1,3</sup> ..... \$1,000..		1,394	2,818	2,104	2,977	3,241
<b>HEAVY WATER</b>						
Sales by AEC..... tons..		86	82	96	421	98
Value..... \$1,000..		4,867	4,067	4,767	19,882	4,822
						348
						17,234

<sup>—</sup> Represents zero. <sup>1</sup> Calendar year data. <sup>2</sup> As of December.

<sup>3</sup> Source: Dept. of Commerce, Bureau of the Census; Prior to 1968, FT 9523, U.S. Exports of Radioactive and Stable Isotopes and FT 9066, U.S. Imports of Radioactive Substances; beginning 1968, FT 410, U.S. Exports, Schedule B Commodity and Country and FT 246, U.S. Imports for Consumption and General Imports, TSUSA Commodity and Country; export figures include shipments made by AEC and by commercial firms.

Source: Atomic Energy Commission; *Annual Report*, and unpublished data, except as noted.

No. 817. ATOMIC ENERGY COMMISSION—FINANCES AND EMPLOYMENT: 1955 TO 1969

[Money figures in millions of dollars. For years ending June 30]

ITEM	1955	1960	1965	1966	1967	1968	1969
<b>Appropriations received.....</b>	1,210	2,650	2,625	2,366	2,199	2,509	2,616
Operations.....	1,099	2,387	2,262	2,122	1,923	2,140	2,109
Plant and capital equipment.....	111	263	363	244	276	369	507
<b>Plant investment, year end.....</b>	6,487	7,345	8,871	9,048	9,062	9,127	9,454
Completed plant.....	5,858	7,018	8,470	8,748	8,820	8,827	9,012
Production plants.....	4,646	5,458	5,464	5,446	5,368	5,310	5,333
Research and development facilities.....	707	1,271	2,370	2,672	2,841	2,926	3,077
Other.....	505	289	636	629	611	591	602
Construction in progress.....	629	327	401	300	243	300	442
<b>Cost of operations (incl. depreciation).....</b>	1,290	2,619	2,570	2,440	2,447	2,507	2,566
Procurement of raw materials.....	194	717	261	206	162	125	101
Production of nuclear materials.....	588	731	571	544	521	507	495
Weapons development and fabrication.....	259	505	763	730	737	784	898
Development of nuclear reactors.....	115	399	538	489	528	548	508
Physical research.....	48	133	237	265	292	310	332
Biology and medicine research.....	29	49	84	91	95	99	99
Community operations (net).....	10	7	4	3	2	1	—
Administrative expenses.....	34	51	80	84	89	97	108
Miscellaneous expenses and income (net).....	13	27	31	29	20	36	25
<b>Employment.....</b>	112,618	122,718	133,912	128,206	130,101	129,959	132,296
Federal Government.....	6,076	6,907	7,329	7,443	7,506	7,665	7,467
Contractor operating.....	82,936	104,612	114,783	112,221	113,619	111,846	111,305
Contractor construction and design.....	23,606	11,199	11,800	8,542	8,976	10,448	13,524

<sup>—</sup> Represents zero.

Source: Atomic Energy Commission; *Financial Report*.

## No. 818. FEDERAL SPACE PROGRAM—EXPENDITURES, BY AGENCY: 1960 TO 1971

[In millions of dollars. For years ending June 30]

YEAR	Total <sup>1</sup>	NASA <sup>2</sup>	Dept. of Defense	AEC <sup>3</sup>	YEAR	Total <sup>1</sup>	NASA <sup>2</sup>	Dept. of Defense	AEC <sup>3</sup>
1960.....	888	329	518	41	1966.....	7,719	5,858	1,637	188
1961.....	1,468	694	710	64	1967.....	7,237	5,337	1,673	184
1962.....	2,387	1,226	1,029	130	1968.....	6,667	4,595	1,890	146
1963.....	4,079	2,517	1,368	181	1969.....	6,330	4,083	2,095	116
1964.....	5,930	4,131	1,564	220	1970 (est.)	5,666	3,710	1,820	103
1965.....	6,886	5,035	1,592	232	1971 (est.)	5,045	3,219	1,690	104

<sup>1</sup> Includes agencies not shown separately.<sup>2</sup> National Aeronautics and Space Administration. Excludes amounts for aircraft technology.<sup>3</sup> Atomic Energy Commission.Source: 1960-1965, Report to the Congress from the President of the United States: *United States Aeronautics and Space Activities, 1966*; thereafter, Executive Office of the President, Bureau of the Budget, *The Budget of the United States Government*.

## No. 819. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—EXPENDITURES FOR RESEARCH AND DEVELOPMENT: 1965 TO 1970

[In millions of dollars. For years ending June 30]

PROGRAM	PERFORMANCE						FACILITIES					
	1965	1966	1967	1968	1969	1970 est.	1965	1966	1967	1968	1969	1970 est.
	Total.....	4,562	5,361	5,137	4,599	4,186	3,829	531	572	289	127	65
Manned space flight.....	3,138	3,819	3,477	3,028	2,754	2,335	401	392	172	69	27	20
Space applications.....	87	112	122	116	112	155	2	2	(2)	—	—	—
Space sciences.....	639	643	660	578	450	474	23	22	14	8	7	5
Space technology.....	431	396	408	389	330	328	53	40	33	21	14	9
Aircraft technology.....	58	71	87	125	162	174	—	4	2	4	7	6
Supporting operations.....	210	321	384	365	378	363	51	114	68	25	10	20

— Represents zero. Z Less than \$500,000.

Source: Executive Office of the President, Bureau of the Budget; unpublished data.

## No. 820. SPACECRAFT LAUNCHINGS: 1957 TO 1969

[Criterion of success is attainment of earth orbit or earth escape, respectively]

YEAR	UNITED STATES				U.S.S.R. successful launchings	YEAR	UNITED STATES				U.S.S.R. successful launchings			
	Earth orbit		Earth escape				Earth orbit		Earth escape					
	Suc- cess	Fai- lure	Suc- cess	Fai- lure			Suc- cess	Fai- lure	Suc- cess	Fai- lure				
Total.....	625	101	39	12	428	1963.....	60	11	—	—	18			
1957.....	—	1	—	—	2	1964.....	89	8	4	—	38			
1958.....	5	8	—	4	1	1965.....	94	8	3	—	73			
1959.....	9	9	1	2	3	1966.....	95	12	5	1 1	51			
1960.....	16	12	1	2	3	1967.....	77	4	10	—	67			
1961.....	35	12	—	1 2	7	1968.....	61	3	3	—	74			
1962.....	54	12	4	1	21	1969.....	50	1	8	—	70			

— Represents zero.

<sup>1</sup> Attained earth orbit and included in earth orbit success totals.Source: Report to the Congress from the President of the United States; *U.S. Aeronautical and Space Activities, 1968* and *1969*.

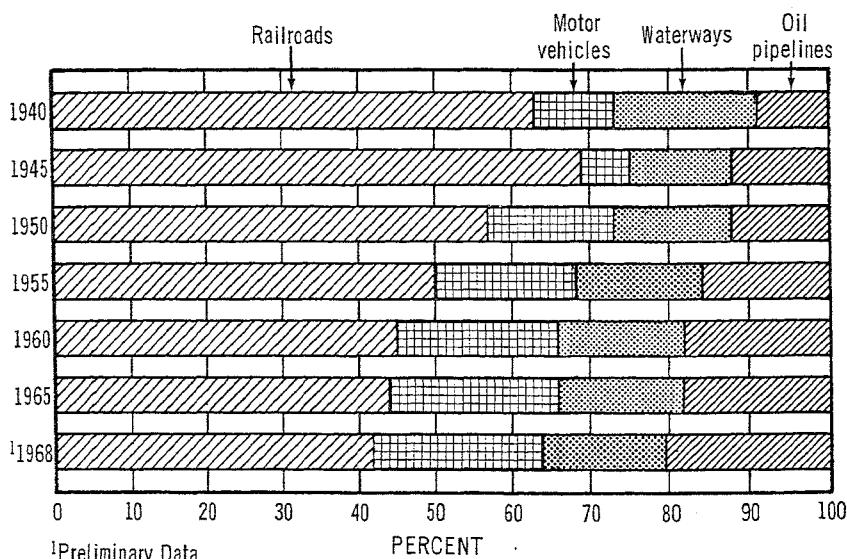
## No. 821. ORBITAL MANNED SPACECRAFT: 1961 THROUGH MAY 1970

COUNTRY, VEHICLE, AND ASTRONAUT	Launch- ing date	PAYLOAD		EARTH ORBITS			Life- time (hr.: min.)
		Dimensions <sup>1</sup> (ft.)	Liftoff weight (lb.)	Perigee (statute miles)	Apogee (statute miles)	Revolu- tions <sup>2</sup>	
<b>UNITED STATES</b>							
<b>Mercury Atlas:</b> <sup>3</sup>							
VI..... Glenn	2-20-62	4 26H-6D	4,265	100	162.2	3	4:55
VII..... Carpenter	5-24-62	4 26H-6D	4,244	99.9	166.8	3	4:56
VIII..... Schirra	10-3-62	4 26H-6D	4,325	100	175.8	6	9:13
IX..... Cooper	5-15-63	4 26H-6D	4,000	100.3	165.9	22	34:19
<b>Gemini:</b> <sup>4</sup>							
III..... Grissom and Young	3-23-65	19H-10D	7,136	100	139	3	4:52
IV..... McDivitt and White	6-3-65	19H-10D	7,879	100	184	62	97:56
V..... Cooper and Conrad	8-21-65	19H-10D	7,879	100	207	120	190:55
VI..... Schirra and Stafford	12-15-65	19H-10D	7,817	100	193	16	25:51
VII..... Borman and Lovell	12-4-65	19H-10D	8,076	100	204	206	330:35
VIII..... Armstrong and Scott	3-16-66	19H-10D	8,351	99	186	6.6	10:41
IX..... Cernan and Stafford	6-3-66	19H-10D	8,100	100	194	45	72:21
X..... Young and Collins	7-18-66	19H-10D	8,295	100	475	43	70:46
XI..... Conrad and Gordon	9-12-66	19H-10D	8,374	99	853	44	71:17
XII..... Lovell and Aldrin	11-11-66	19H-10D	8,296	100	187	59	94:34
<b>Apollo:</b> <sup>5</sup>							
VII..... Schirra, Eisele, and Cunningham	10-11-68	4 82H-21.7D	45,374	104	282	163	260:08
VIII..... Borman, Lovell, and Anders	12-21-68	4 82H-21.7D	96,260	119	119	2	147:00
IX..... McDivitt, Scott, Schweickart	3-3-69	4 82H-21.7D	103,985	112	312	151	241:00
X..... Stafford, Young, and Cernan	5-18-69	4 82H-21.7D	107,230	115	118	2	192:03
XI..... Armstrong, Collins, and Aldrin	7-16-69	4 82H-21.7D	109,565	103	103	102	195:18
XII..... Conrad, Gordon, and Bean	11-14-69	4 82H-21.7D	109,800	99.9	102.5	112	244:36
XIII..... Lovell, Swigert, and Haise	4-11-70	4 82H-21.7D	110,210	100.2	100.3	122	142:55
<b>U.S.S.R.</b>							
<b>Vostok (East):</b>							
I..... Gagarin	4-12-61	20H	10,418	108.8	187.7	1	1:48
II..... Titov	8-6-61	20H-12-14D	10,430	110.3	115.3	17.5	25:18
III..... Nikolayev	8-11-62	(NA)	10,400	107.4	137.2	64+	94:35
IV..... Popovich	8-12-62	(NA)	10,400	111	158	48+	70:57
V..... Bykovsky	6-14-63	(NA)	10,360	99	120	81	119:06
VI..... Tereshkova	6-16-63	(NA)	10,360	108	135	48	70:50
<b>Voskhod (Sunrise):</b>							
I..... Komarov, Yegorov, and Feoktistov	10-12-64	(NA)	16,000	111	254	16	24:17
II..... Belyayev and Leonov	3-18-65	(NA)	107.2	306.9	17	27:02	
<b>Soyuz (Union):</b>							
I..... Komarov <sup>13</sup>	4-23-67	(NA)	(NA)	122.6	137.9	18	26:45
III..... Beregovoy	10-26-68	(NA)	(NA)	(NA)	(NA)	61	94:51
IV..... Shatalov	1-14-69	(NA)	(NA)	(NA)	(NA)	48	71:14
V..... Volynov, Yeliseyev, Krunov	1-15-69	(NA)	(NA)	(NA)	(NA)	49	72:46
VI..... Shonin, Kubasov	10-11-69	(NA)	14,500	(NA)	(NA)	75	118:21
VII..... Filipchenko, Volkov, Gorbatko	10-12-69	(NA)	14,500	(NA)	(NA)	75	118:43
VIII..... Shatalov, Yeliseyev	10-13-69	(NA)	14,500	(NA)	(NA)	75	118:51

NA Not available. <sup>1</sup>H =height; D=diameter.<sup>2</sup>A revolution is the distance a spacecraft must travel to return to a specified line of earth longitude.<sup>3</sup>Vehicle lift-off weight, 260,000 lb.; dimensions, 93H-16D.<sup>4</sup>Dimensions and weight cover Apollo spacecraft command service and lunar modules including escape tower.<sup>5</sup>Recovery weight (in lb.): 2,400, 2,480, 2,440, and 2,460, respectively.<sup>6</sup>Vehicle lift-off weight, 340,000 lb.; dimensions, 109H-10D; payload recovery weight, 4,700 lb.<sup>7</sup>Vehicle lift-off weight, 6,800,000 lb.; maximum dimensions, 363H-33D; payload recovery weight, 11,700 lb.<sup>8</sup>2 earth and 10 lunar orbits, 70 statute miles above the moon.<sup>9</sup>2 earth orbits plus 30.8 lunar orbits by the command and lunar excursion modules; time in lunar orbit, 61 hours, 41 minutes. For the command module, the low and high points in lunar orbit were 68.6 and 196.1 statute miles, respectively; for the lunar excursion module, 9.7 and 219.8 miles.<sup>10</sup>Two earth revolutions and 30 lunar revolutions at 70 miles; first manned lunar landing; 47.6 lb. of rocks returned; astronauts on lunar surface 21 hrs. 36 min.<sup>11</sup>Two earth revolutions and 44.5 lunar revolutions at 70 miles; second manned lunar landing; about 75 lb. of rocks returned; astronauts on surface 31.5 hours.<sup>12</sup>Two earth orbits; spacecraft made one pass around moon and returned to earth.<sup>13</sup>Cosmonaut was killed when spacecraft crashed when landing.Source: National Aeronautics and Space Administration; *Space Activities Summary*, various dates. (For U.S.S.R., based on unofficial data from U.S. and Soviet press and radio.)

FIG. XXXIV. PERCENT DISTRIBUTION OF TON-MILES OF DOMESTIC INTERCITY FREIGHT TRAFFIC, BY TYPE OF TRANSPORTATION: 1940 TO 1968

[Airways not shown separately—less than 1 percent. See table 823]



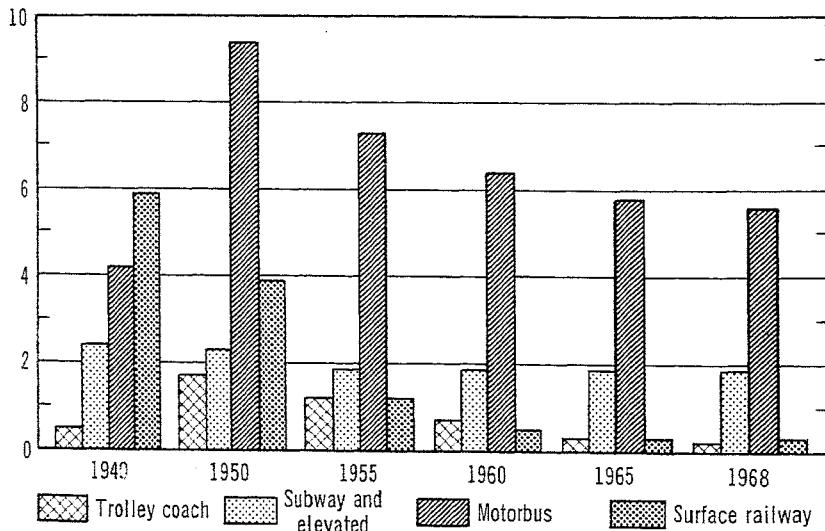
<sup>1</sup>Preliminary Data

Source: Chart prepared by Dept. of Commerce, Bureau of the Census. Data from Interstate Commerce Commission.

FIG. XXXV. PASSENGERS CARRIED BY PUBLIC TRANSPORTATION: 1940 TO 1968

[See table 852]

BILLIONS OF PASSENGERS



Source: Chart prepared by Dept. of Commerce, Bureau of the Census. Data from American Transit Association, Washington, D.C.

## Section 21

### Transportation—Land

This section presents statistics relating to the mileage, control, and financing of public roads and to the transportation of persons and goods by land. The modes of transport included are passenger car, truck, railroad, bus and streetcar, and pipeline.

The principal compiler of data on public roads and on ownership and operation of motor vehicles is the Department of Transportation's Federal Highway Administration. The annual *Highway Statistics* and the historical *Highway Statistics, Summary to 1965*, are publications of the Bureau of Public Roads; *Accidents of Large Motor Carriers of Property* and *Accidents of Class I Motor Carriers of Passengers*, which present data on accidents involving intercity trucks and buses, respectively, are annual publications of the Bureau of Motor Carrier Safety. The department's Federal Railroad Administration presents data on accidents involving railroads in its annual *Accident Bulletin*.

Another major source of data on land transport is the Interstate Commerce Commission. Among its publications are the monthly *Transport Economics* and the *Annual Report*, containing operating data on all types of domestic transport, and the annual *Transport Statistics in the United States*, which is issued in separate parts. Part 1 is devoted to railroads, part 6 to oil pipelines, and part 7 to motor carriers. *Statistics of Railways in the United States*, published annually from 1887 through 1953, is a source of historical data.

Various censuses conducted by the Bureau of the Census also provide data relating to transportation. Data from the 1963 and 1967 censuses of transportation are presented in *Commodity Transportation Survey*, *National Travel Survey*, and *Truck Inventory and Use Survey*. The 1967 *Motor Carrier Survey* was conducted as part of the Census of Business; data from the corresponding 1963 survey were issued as part of the Census of Transportation. The *Annual Survey of Manufactures* and reports of the Census of Manufacturers and the Census of Business contain statistics on the motor-vehicle and equipment industry and on retail, wholesale, and services aspects of this industry. Additional data from those reports are included in sections 28 and 29.

Nongovernmental data can be found in the weekly and annual *Cars of Revenue Freight Loaded* and the annual *Yearbook of Railroad Facts*, both published by the Association of American Railroads, Washington, D.C.; *Bus Facts*, issued annually by the National Association of Motor Bus Owners, Washington; the *Transit Fact Book*, containing street railway and motorbus statistics, published annually by the American Transit Association, Washington; and *Transportation Facts and Trends*, issued by the Transportation Association of America, Washington. Useful annual handbooks in the field of motor-vehicle transport are *Automobile Facts and Figures* and *Motor Truck Facts*, both issued by the Automobile Manufacturers Association, Detroit; *American Trucking Trends*, issued by the American Trucking Association, Washington; and *Accident Facts*, issued by the National Safety Council, Chicago.

**Highway systems.**—The Federal-Aid Highway Act of 1916 provides for the sharing of highway construction costs between the States and the Federal Government with the initiative retained by each State for choosing projects and carrying them out. The planning and development of Federal-aid systems began in 1921. Federal funds share with State funds in costs of engineering, construction, and right-of-way acquisition on the designated systems while other charges, such as maintenance and policing, are borne entirely by the States and local agencies.

The Federal-aid primary system connects all of the principal cities, county seats, ports, manufacturing areas, and other traffic generating areas. In general, these are

the same as the State trunklines. The Federal-aid secondary system consists of important feeder roads linking the farms, factories, distribution outlets, and smaller communities with the primary system.

**Motor carriers.**—Prior to 1950, class I for-hire motor carriers were classified by the Interstate Commerce Commission as those with \$100,000 or more of gross annual operating revenue. Beginning 1950, the class I minimum became \$200,000. Beginning 1957, the class I minimum for motor carriers of property was increased to \$1,000,000; however, the minimum for class I motor carriers of passengers remained at \$200,000.

**Railroads.**—The total railroad mileage of the United States comprises companies reporting to the Interstate Commerce Commission, grouped as follows: (1) Regular interstate carriers (and their nonoperating subsidiaries); (2) switching and terminal railroads; and (3) private railroads (identified by the Commission as "circular" because they report on brief circulars, or as "unofficial" when their reports are received too late for tabulation). For the most part, circular and unofficial companies, and switching and terminal railroads, are not included in the statistics.

Nonoperating subsidiaries comprise proprietary companies, which are covered by the reports of operating carriers, and lessor companies, which have no traffic and whose reports appear only in statistics of capitalization, dividends, and investment.

Operating railroads are classified on the basis of operating revenues. Prior to 1956, the classification was as follows: Class I, those having more than \$1,000,000 gross annual operating revenue; class II, from \$100,000 to \$1,000,000; and class III, less than \$100,000. From 1956 to 1964, the following classification was in effect: Class I, \$3,000,000 or more; and class II, under \$3,000,000. Effective January 1965, the classification was changed to the following: Class I, \$5,000,000 or more; and class II, under \$5,000,000.

**Historical statistics.**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1957*. See preface.

#### No. 822. OPERATING REVENUES, BY TYPE OF TRANSPORT: 1940 TO 1968

[Excludes Alaska and Hawaii, except as noted]

TRANSPORT AGENCY	1940	1945	1950	1955	1960	1965	1966	1967	1968 (prel.)
<b>REVENUES (mil. dol.)</b>									
Pullman Company	60	148	104	95	56	36	35	26	18
Electric railways	53	87	70	60	23	13	14	12	12
Railway Express <sup>1</sup>	120	284	223	241	249	316	324	323	299
Railroads <sup>2,3</sup>	4,459	9,136	9,820	10,495	9,899	10,702	11,163	10,849	11,337
Waterlines <sup>4</sup>	113	173	330	452	427	426	460	426	435
Pipelines (oil) <sup>4</sup>	226	304	442	678	770	904	941	995	1,023
Domestic scheduled air carriers <sup>5</sup>	77	215	558	1,215	2,129	3,609	4,070	4,887	5,607
Motor carriers of property <sup>5</sup>	898	1,840	3,737	5,535	7,214	10,068	10,862	11,308	11,772
Motor carriers of passengers	176	652	539	552	667	885	901	945	991
<b>INDEX (1957-59=100)</b>									
Railroads <sup>2</sup>	43	88	95	101	96	108	108	105	110
Pipelines (oil) <sup>4</sup>	31	41	60	92	104	122	127	135	139
Domestic scheduled air carriers <sup>5</sup>	4	12	32	70	22	207	234	280	322
Motor carriers of property <sup>5</sup>	14	28	58	85	111	155	168	175	182
Motor carriers of passengers	29	107	88	91	109	145	148	155	163

<sup>1</sup> After deducting payments to others for express privileges.

<sup>2</sup> Includes line-haul and switching and terminal companies.

<sup>3</sup> Beginning 1960, includes Alaska and Hawaii.

<sup>4</sup> Includes only revenues from domestic traffic of carriers under jurisdiction of Interstate Commerce Commission.

<sup>5</sup> Beginning 1960, includes 1 pipeline operating in Alaska.

<sup>6</sup> Source: Dept. of Transportation, Federal Aviation Administration; *F.A.A. Statistical Handbook of Aviation*. Beginning 1955, includes Alaska and Hawaii. Revenues for scheduled passenger cargo operations.

Source: Interstate Commerce Commission; *Annual Report, Statistics of Class I, II, and III Motor Carriers, 1939-1966* (Statement No. 389), and *Transport Economics*, except as noted.

# Intercity Freight and Passenger Traffic

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## No. 823. VOLUME OF DOMESTIC INTERCITY FREIGHT TRAFFIC, BY TYPE OF TRANSPORT: 1940 TO 1968

[In millions of ton-miles, except percent. Motor vehicles and airways, prior to 1959, and other types of transportation, prior to 1960, exclude Alaska and Hawaii, except as noted. A ton-mile is the movement of 1 ton (2,000 pounds) of freight for the distance of 1 mile. Comprises public and private traffic, both revenue and nonrevenue. See also *Historical Statistics, Colonial Times to 1957*, series Q 1-11.]

YEAR	Total traffic, volume	RAILROADS <sup>1</sup>		MOTOR VEHICLES		INLAND WATERWAYS <sup>2</sup>		OIL PIPELINES		AIRWAYS <sup>3</sup>	
		Volume	Percent of total	Volume	Percent of total	Volume	Percent of total	Volume	Percent of total	Volume	Percent of total
1940-----	651,204	411,813	63.24	62,043	9.53	118,057	18.13	59,277	9.10	14	0.002
1945-----	1,072,490	736,184	68.64	66,948	6.24	142,737	13.31	126,530	11.80	91	0.008
1950-----	1,094,180	628,463	57.44	172,860	15.90	163,344	14.93	129,175	11.81	318	0.029
1955-----	1,298,060	654,573	50.43	223,254	17.20	216,508	16.68	203,244	15.66	481	0.037
1956-----	1,376,320	676,974	49.19	248,846	18.08	219,978	15.98	229,959	16.71	563	0.041
1957-----	1,354,012	674,746	47.62	254,174	18.77	231,792	17.12	222,728	16.45	572	0.042
1958-----	1,281,184	574,756	46.68	255,544	20.76	189,016	15.35	211,289	17.16	579	0.047
1959-----	1,302,570	599,347	46.01	278,934	21.41	196,559	15.09	226,991	17.43	739	0.057
1960-----	1,329,995	594,855	44.73	285,483	21.46	220,253	16.56	228,626	17.19	778	0.058
1961-----	1,325,816	583,558	44.17	296,485	22.36	209,706	15.82	233,172	17.59	895	0.068
1962-----	1,387,228	615,720	44.38	309,407	22.30	223,089	16.08	237,723	17.14	1,289	0.093
1963-----	1,468,733	643,664	43.82	336,170	22.89	234,172	15.94	253,431	17.26	1,296	0.088
1964-----	1,555,793	679,171	43.66	356,298	22.90	250,165	16.08	268,655	17.27	1,504	0.096
1965-----	1,650,997	721,055	43.67	359,218	21.76	262,421	15.89	306,393	18.56	1,910	0.116
1966-----	1,758,556	761,944	43.33	380,917	21.66	280,527	15.95	332,916	18.93	2,252	0.128
1967-----	1,775,582	742,049	41.79	388,500	21.88	281,400	15.85	361,041	20.33	2,592	0.145
1968 (prel.)	1,846,038	768,538	41.63	396,300	21.46	287,000	15.55	391,300	21.20	2,900	0.157

<sup>1</sup> Includes electric railways, express, and mail.

<sup>2</sup> Includes Great Lakes. Includes Alaska for all years and Hawaii beginning 1959.

<sup>3</sup> Domestic revenue service only. Includes express, mail, and excess baggage.

Source: Interstate Commerce Commission; *Annual Report*, Statement No. 6103, *Intercity Ton-Miles, 1959-1959*, April 1961 and *Transport Economics*, December 1967.

## No. 824. VOLUME OF DOMESTIC INTERCITY PASSENGER TRAFFIC, BY TYPE OF TRANSPORT: 1950 TO 1968

[In millions of passenger-miles, except percent. Airways, prior to 1959, and other types of transportation, prior to 1960, exclude Alaska and Hawaii. A passenger-mile is the movement of 1 passenger for the distance of 1 mile. Comprises public and private traffic, both revenue and nonrevenue.]

YEAR	Total traffic, volume	PRIVATE AUTOMOBILES		AIRWAYS <sup>1</sup>		BUS (excludes schoolbus)		RAILROADS <sup>2</sup>		INLAND WATERWAYS <sup>3</sup>	
		Volume	Percent of total	Volume	Percent of total	Volume	Percent of total	Volume	Percent of total	Volume	Percent of total
1950-----	508,472	438,293	86.20	10,072	1.98	26,436	5.20	32,481	6.39	1,190	0.23
1953-----	655,338	575,763	87.88	17,430	2.66	28,397	4.33	32,261	4.92	1,487	0.23
1954-----	673,404	597,054	88.66	19,568	2.91	25,614	3.80	29,467	4.38	1,701	0.25
1955-----	716,062	637,369	89.01	22,741	3.18	25,519	3.56	28,695	4.01	1,738	0.24
1956-----	750,861	669,679	89.19	25,523	3.40	25,189	3.35	28,610	3.81	1,860	0.25
1957-----	748,248	670,484	89.61	28,128	3.76	21,455	2.87	26,251	3.51	1,930	0.26
1958-----	759,848	684,892	90.14	28,522	3.75	20,756	2.73	23,605	3.11	2,073	0.27
1959-----	764,735	687,406	89.89	32,566	4.26	20,364	2.66	22,373	2.93	2,026	0.26
1960-----	783,626	706,079	90.10	33,958	4.33	19,327	2.47	21,574	2.75	2,088	0.34
1961-----	791,386	713,636	90.18	34,599	4.37	20,279	2.56	20,527	2.59	2,345	0.30
1962-----	818,140	735,931	89.95	37,491	4.58	21,801	2.66	20,181	2.47	2,736	0.33
1963-----	852,575	765,877	89.83	42,765	5.02	22,538	2.64	18,632	2.19	2,763	0.32
1964-----	895,537	801,796	89.53	49,185	5.49	23,344	2.61	18,374	2.05	2,838	0.32
1965-----	920,179	817,663	88.86	58,083	6.31	23,775	2.58	17,557	1.91	3,101	0.34
1966-----	971,021	856,358	88.19	66,356	7.14	24,592	2.53	17,268	1.78	3,447	0.35
1967-----	1,020,647	889,800	87.18	87,241	8.55	24,906	2.44	15,344	1.50	3,356	0.33
1968 (prel.)	1,080,571	936,426	86.66	101,189	9.37	26,211	2.42	13,265	1.23	3,480	0.32

<sup>1</sup> Includes domestic commercial revenue service and private pleasure and business flying.

<sup>2</sup> Includes electric railways. <sup>3</sup> Includes Great Lakes.

Source: Interstate Commerce Commission; *Annual Report*, and *Transport Economics*, December 1967 and September 1969.

## Transportation—Land

**No. 825. EMPLOYMENT IN TRANSPORTATION, BY TYPE OF TRANSPORT: 1960 TO 1969**  
 [Annual averages]

TYPE OF TRANSPORT	NUMBER (1,000)				PERCENT			
	1960	1965	1968	1969	1960	1965	1968	1969
Total.....	2,550	2,532	2,675	2,725	100.0	100.0	100.0	100.0
Railroad.....	885	735	662	645	34.7	29.0	24.8	23.7
Local and interurban passenger.....	284	269	282	283	11.2	10.6	10.5	10.4
Trucking and warehousing.....	856	964	1,046	1,088	33.6	38.1	39.1	39.9
Air.....	191	229	329	351	7.5	9.0	12.3	12.9
Pipeline.....	23	20	19	19	0.9	0.8	0.7	.7
Water.....	310	{ 230	239	235	{ 12.2	{ 9.1	8.9	8.6
Other.....		{ 85	99	104	{ 3.4	{ 3.7	3.7	3.8

Source: Dept. of Labor, Bureau of Labor Statistics; monthly report, *Employment and Earnings*.

**No. 826. LARGEST TRANSPORTATION COMPANIES—REVENUES, ASSETS, INCOME, AND INVESTED CAPITAL, BY RANK OF OPERATING REVENUES: 1960, 1965, AND 1969**

[In millions of dollars, except as indicated. As of December 31 or calendar year, as applicable. Companies listed derive at least 50 percent of their operating revenues from carrier operations; excludes companies primarily engaged in freight forwarding, express shipping, or vehicle rental]

OPERATING REVENUE GROUP	1960		1965		1969			
	Revenues <sup>1</sup>	Assets <sup>2</sup>	Revenues <sup>1</sup>	Assets <sup>2</sup>	Revenues <sup>1</sup>	Assets <sup>2</sup>	Net income	Invested capital <sup>3</sup>
50 largest.....	11,795	30,684	15,702	35,606	22,157	44,869	739	19,451
Lowest ten.....	719	1,277	927	1,919	990	1,756	56	763
Second ten.....	1,111	1,905	1,258	1,733	1,323	1,877	1	770
Third ten.....	1,785	5,548	2,257	5,694	2,533	3,550	23	1,329
Fourth ten.....	2,718	7,589	3,690	8,331	5,517	12,161	440	6,133
Highest ten.....	5,461	14,366	7,569	17,930	11,795	25,525	219	10,455
Percent of total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Lowest ten.....	6.1	4.2	5.9	5.4	4.5	3.9	7.6	3.9
Second ten.....	9.4	6.2	8.0	4.9	6.0	4.2	0.2	4.0
Third ten.....	15.1	18.1	14.4	16.0	11.4	7.9	3.1	6.8
Fourth ten.....	23.0	24.7	23.5	23.4	24.9	27.1	50.5	31.5
Highest ten.....	46.3	46.8	48.2	50.4	53.2	56.9	29.6	53.8

<sup>1</sup> Gross receipts from transportation (including consolidated subsidiaries) for year.

<sup>2</sup> Total assets employed in business, net of depreciation.

<sup>3</sup> Capital stock, surplus, and retained earnings.

Source: Fortune, New York, N.Y.; adapted from *The Fortune Directory*. (Copyright, 1970 by Time Inc.)

**No. 827. HIGHWAY CONSTRUCTION—CONTRACTS AWARDED: 1947 TO 1969**

[In millions of dollars. Prior to 1960, excludes Alaska and Hawaii. Covers federally and State owned highways only; includes force-account construction authorized to start]

OWNERSHIP AND SOURCE OF FUNDS	1947	1950	1955	1960	1965	1966	1967	1968	1969
Total.....	917	1,528	2,619	4,030	4,935	5,459	5,522	5,305	6,657
Federally owned highways.....	25	36	59	129	135	127	78	84	70
State owned highways.....	892	1,492	2,560	3,901	4,800	5,332	5,444	5,220	6,587
Federally aided projects:									
Total value.....	635	798	1,256	3,097	3,896	4,173	4,112	3,711	5,048
Federal funds.....	329	415	667	2,218	2,976	3,131	3,077	2,766	3,784
Independent State projects:									
Total value.....	257	694	1,304	804	904	1,159	1,332	1,510	1,539
Toll facilities.....	(N.A.)	228	695	165	49	99	213	63	78

N.A. Not available.

Source: Dept. of Commerce, Bureau of the Census. In Dept. of Commerce, *Business and Defense Services Administration; Construction Review*.

No. 828. RURAL AND MUNICIPAL HIGHWAY MILEAGE, BY GOVERNMENTAL CONTROL: 1930 TO 1968

[In thousands. As of December 31. Prior to 1960, excludes Alaska and Hawaii. Municipal roads are those within incorporated places, densely populated New England towns, and certain of the more populous unincorporated areas. All other roads are classed as rural. See *Historical Statistics, Colonial Times to 1957*, series Q 246, and, for similar but not exactly comparable data, series Q 247 and Q 251.]

MILEAGE AND CONTROL	1930	1940	1950	1955	1960	1965	1966	1967	1968
Total mileage.....	(NA)	(NA)	3,313	3,418	3,546	3,690	3,698	3,705	3,684
Rural mileage.....	3,009	2,990	2,990	3,045	3,116	3,183	3,188	3,184	3,152
Under State control.....	324	524	551	619	659	687	695	699	702
Under local control.....	2,685	2,466	{ 2,336	2,333	2,345	2,346	2,333	2,321	2,275
Under Federal control.....			73	93	112	150	160	164	175
Municipal mileage.....	(NA)	(NA)	323	373	430	507	510	521	532
Under State control.....	(NA)	27	36	42	50	65	66	68	69
Under local control.....	(NA)	(NA)	287	331	380	442	444	453	463

NA Not available.

No. 829. HIGHWAY MILEAGE OF RURAL ROADS: 1930 TO 1968

[In thousands. As of December 31. Prior to 1960, excludes Alaska and Hawaii. For definition of rural roads, see headnote, table 828. See *Historical Statistics, Colonial Times to 1957*, series Q 247-250, for similar but not exactly comparable data.]

TYPE AND CONTROL	1930	1940	1950	1955	1960	1965	1966	1967	1968
All rural roads.....	3,009	2,990	2,990	3,045	3,116	3,183	3,188	3,184	3,152
Primary State highways.....	{ 324	320	363	387	403	414	418	424	425
Secondary State highways.....		81	88	91	105	112	114	112	113
County roads under State control.....	-	114	122	131	136	137	138	138	139
County and local roads <sup>1</sup> .....	2,685	2,466	2,417	2,436	2,472	2,520	2,518	2,510	2,475
Surfaced rural roads.....	694	1,340	1,679	1,942	2,165	2,302	2,321	2,336	2,362
Primary State highways.....	{ 302	351	381	399	410	414	420	420	421
Secondary State highways.....	227	65	73	84	100	108	110	108	109
County roads under State control.....	-	55	83	103	111	118	120	120	122
County and local roads <sup>1</sup> .....	467	918	1,172	1,374	1,555	1,666	1,677	1,688	1,710

- Represents zero. <sup>1</sup> Includes mileage in national and State parks, forests, reservations, etc., not included as part of State or local systems.

Source of tables 828 and 829: Dept. of Transportation, Federal Highway Administration; annual report, *Highway Statistics*.

No. 830. MILEAGE AND COST OF DESIGNATED FEDERAL-AID HIGHWAY SYSTEMS: 1917 TO 1969

Prior to 1960, excludes Alaska; includes Puerto Rico. See also *Historical Statistics, Colonial Times to 1957*, series Q 261-264]

PERIOD OR YEAR	MILES OF HIGHWAY (1,000)		COST <sup>2</sup> (mil. dol.)			YEAR	MILES OF HIGHWAY (1,000)		COST <sup>2</sup> (mil. dol.)		
	Total existent <sup>1</sup>	Completed during year <sup>2</sup>	Total	Federal funds	State funds		Total existent <sup>1</sup>	Completed during year <sup>2</sup>	Total	Federal funds	State funds
1917-1921...	(NA)	13	222	95	127	1960.....	867	21	3,264	2,273	992
1925.....	179	11	221	100	121	1963.....	892	20	3,790	2,767	1,023
1930.....	193	10	237	100	137	1964.....	901	19	4,560	3,385	1,175
1935.....	214	13	242	218	24	1965.....	909	17	4,569	3,430	1,139
1940.....	234	12	268	150	119	1966.....	911	16	5,362	4,151	1,211
1945.....	233	3	101	76	25	1967.....	911	14	5,178	4,039	1,139
1950.....	641	20	753	390	364	1968.....	911	12	4,132	3,167	965
1955.....	742	23	1,287	666	621	1969.....	(NA)	11	4,826	3,706	1,120

NA Not available.

<sup>1</sup> Through 1945, total existing mileage of Federal-aid primary system; beginning 1950, includes secondary system. Through 1955, data as of June 30; thereafter, as of Dec. 31.

<sup>2</sup> Comprises construction and reconstruction mileage.

<sup>3</sup> Represents actual expenditures of funds on calendar-year basis. Beginning 1935, includes money spent on public works and defense highways. Beginning 1940, includes secondary highways.

Source: Dept. of Transportation, Federal Highway Administration; annual reports, *Highway Statistics* and *Highway Progress*, and releases.

## No. 831. MUNICIPAL AND RURAL HIGHWAY MILEAGE—STATES: 1968

[As of December 31. For definition of municipal and rural roads, see headnote, table 828. Compiled for latest available year from reports of State authorities and planning survey data]

STATE	Total municipal and rural	Munic- ipal	RURAL					
			Total	Type		Governmental control		
				Surfaced	Nonsur- faced	State <sup>1</sup>	Local	Federal <sup>2</sup>
United States...	3,684,085	532,038	3,152,047	2,361,855	790,192	3,702,280	2,274,495	175,272
Alabama...	78,097	11,385	66,712	59,896	6,816	19,913	46,799	—
Alaska...	6,850	526	6,324	2,915	3,400	4,310	1,477	537
Arizona...	41,062	5,682	35,380	14,951	20,429	5,183	17,529	12,668
Arkansas...	78,839	8,420	70,419	49,706	20,713	12,935	55,609	1,875
California...	158,189	42,795	115,364	75,844	39,520	13,501	70,821	31,042
Colorado...	81,517	6,499	75,018	41,920	33,098	8,222	66,745	51
Connecticut...	18,116	12,803	5,313	5,225	88	1,513	3,800	—
Delaware...	4,847	1,401	3,446	3,438	8	3,446	—	—
Dist. of Columbia...	1,083	1,083	(X)	(X)	(X)	(X)	(X)	(X)
Florida...	85,889	19,700	66,189	41,551	24,638	16,530	48,607	1,052
Georgia...	98,241	14,029	84,212	54,672	29,540	15,641	68,231	340
Hawaii...	3,442	943	2,499	2,332	167	883	1,525	91
Idaho...	54,758	2,817	51,941	27,554	24,387	4,679	26,691	20,571
Illinois...	129,419	26,811	102,608	95,839	6,769	13,140	89,468	—
Indiana...	90,950	12,634	78,316	74,192	4,124	10,170	68,146	—
Iowa...	112,349	12,689	99,660	92,700	6,960	9,164	90,490	6
Kansas...	133,405	10,111	123,294	86,881	36,413	9,986	113,308	—
Kentucky...	69,909	5,040	64,860	51,879	12,981	23,756	40,668	436
Louisiana...	52,733	10,842	41,891	36,809	5,082	14,232	27,373	288
Maine...	21,311	2,352	18,959	17,293	1,666	10,954	7,845	160
Maryland...	25,885	4,065	21,820	21,765	55	4,920	16,757	143
Massachusetts...	27,805	20,313	7,492	6,646	846	1,098	6,365	29
Michigan...	114,170	19,145	95,025	76,768	18,257	7,952	87,071	2
Minnesota...	127,099	16,369	110,730	98,364	12,366	11,503	97,385	1,842
Mississippi...	66,104	6,456	59,648	57,037	2,611	9,762	49,356	530
Missouri...	114,596	14,785	99,811	92,299	7,512	30,017	69,142	652
Montana...	76,437	2,258	74,179	38,284	35,895	11,682	51,518	10,979
Nebraska...	103,464	6,247	97,217	65,443	31,774	9,457	87,198	562
Nevada...	47,562	1,766	45,796	13,366	32,430	6,233	39,562	1
New Hampshire...	14,689	4,697	9,972	7,799	2,173	3,046	6,849	77
New Jersey...	31,522	16,410	15,112	14,816	206	1,791	13,316	5
New Mexico...	66,450	4,020	62,430	16,160	46,270	11,581	45,655	5,194
New York...	102,327	16,849	85,478	76,172	9,306	13,750	71,693	35
North Carolina...	85,029	13,192	71,837	64,508	7,329	70,019	—	1,818
North Dakota...	107,237	3,070	104,167	64,365	39,802	6,476	96,412	1,279
Ohio...	108,360	23,177	85,183	83,488	1,695	16,676	68,507	—
Oklahoma...	107,321	13,280	94,041	65,539	28,502	11,303	82,708	30
Oregon...	90,810	6,034	84,776	51,000	33,776	8,895	34,980	40,901
Pennsylvania...	113,911	23,325	90,586	71,895	18,691	44,067	46,302	217
Rhode Island...	5,203	4,204	999	937	62	504	495	—
South Carolina...	59,520	6,576	52,944	32,890	20,054	30,530	21,897	517
South Dakota...	84,333	2,933	81,400	55,558	25,842	8,606	71,135	1,659
Tennessee...	77,617	9,075	68,542	66,505	2,037	8,300	59,048	1,194
Texas...	240,130	43,351	196,779	131,200	65,579	59,868	136,018	898
Utah...	39,040	4,290	34,750	17,723	17,027	5,220	20,663	8,867
Vermont...	14,208	935	13,273	11,287	1,986	2,391	10,751	131
Virginia...	60,428	8,099	52,829	51,066	1,263	49,467	787	2,075
Washington...	73,955	10,067	68,888	51,411	12,477	11,364	39,522	13,002
West Virginia...	35,850	3,550	32,300	22,871	9,429	31,336	—	964
Wisconsin...	101,729	13,682	88,047	82,569	5,478	10,698	77,273	76
Wyoming...	40,338	1,247	38,091	16,527	22,564	5,615	20,998	12,478

<sup>—</sup> Represents zero. X Not applicable.

<sup>1</sup> Includes 25,382 miles of State park, forest, institutional, and other roads, rural and municipal, that are not part of State or local highway systems. Also includes 4,058 miles of toll roads, bridges, tunnels, etc.

<sup>2</sup> Comprises mileage of roads not forming a part of State or local highway systems.

<sup>3</sup> Includes mileage of county roads under State control in Alabama (10 counties), Delaware, Nevada, North Carolina, Virginia (all but 2 counties), and West Virginia; farm-to-market system in Louisiana; and the State-aid system in Maine.

Source: Dept. of Transportation, Federal Highway Administration; annual report, *Highway Statistics*, 1968.

# Federal-Aid Payments—Highway Debt

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## No. 832. FEDERAL-AID PAYMENTS TO STATE AND LOCAL GOVERNMENTS FOR HIGHWAY CONSTRUCTION—STATES AND PUERTO RICO: 1960 TO 1969

[In millions of dollars. For years ending June 30]

STATE OR OTHER AREA	1960	1965	1968	1969	STATE OR OTHER AREA	1960	1965	1968	1969
Total.....	2,942	4,018	4,262	4,274	Mont.....	31	59	48	53
U.S. ....	2,935	4,011	4,252	4,268	Nebr.....	27	37	31	30
Ala.....	51	91	75	76	N.H.....	10	42	27	27
Alaska.....	16	53	37	42	N.J.....	20	16	22	20
Ariz.....	31	66	68	57	N. Mex.....	53	65	115	119
Ark.....	32	39	42	43	N.Y.....	26	48	45	48
Calif.....	172	324	429	307	N. Dak.....	217	198	213	233
Colo.....	36	61	57	68	Oklahoma.....	59	51	64	59
Conn.....	29	48	71	60	Ohio.....	159	186	213	249
Del.....	8	17	18	10	Oreg.....	33	31	29	21
D.C.....	16	26	37	32	Pa.....	54	77	63	55
Fla.....	75	88	81	72	R.I.....	117	142	224	243
Ga.....	61	81	90	78	S.C.....	13	25	30	21
Hawaii.....	4	10	24	29	S. Dak.....	47	35	42	37
Idaho.....	26	40	30	32	Tenn.....	26	45	37	33
Ill.....	200	209	192	230	Tex.....	67	108	96	98
Ind.....	74	93	120	142	Va.....	198	216	227	197
Iowa.....	68	53	53	52	Utah.....	34	61	52	53
Kans.....	51	51	37	49	Vt.....	17	25	33	34
Ky.....	66	60	111	127	Va.....	53	163	124	132
La.....	70	103	81	106	Wash.....	44	75	97	83
Maine.....	20	24	21	19	W. Va.....	47	56	76	96
Md.....	27	50	59	52	Wis.....	61	54	58	42
Mass.....	67	78	75	107	Wyo.....	26	48	39	43
Mich.....	96	133	146	153	Undist. to States, etc.	28	17	3	-
Minn.....	65	105	120	96	P.R.....	7	7	10	6
Miss.....	36	58	41	45					
Mo.....	76	114	83	84					

- Represents zero.

<sup>1</sup> Includes following amounts for 1968 and 1969, respectively, in millions of dollars: Appalachian highways, 65 and 112; highway beautification, 24 and 15; landscaping and scenic enhancement, 14 and 5; and highway safety, 4 and 18.

<sup>2</sup> Deduct.

Source: Treasury Dept.; *Annual Report of the Secretary*.

## No. 833. PUBLIC HIGHWAY DEBT—LONG-TERM HIGHWAY OBLIGATIONS OF STATE AND LOCAL GOVERNMENTS: 1950 TO 1970

[In millions of dollars. State data are for calendar years; local data are for varying fiscal years. Prior to 1960, excludes Alaska and Hawaii. Excludes duplicated and interunit obligations, except as noted. Municipal obligations include data for all municipalities and other political subdivisions urban in character. See *Historical Statistics, Colonial Times to 1957*, series Q 279, for State obligations outstanding]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)	1970 est.
Total debt issued <sup>1</sup> .....	652	1,174	1,206	1,070	1,680	1,633	1,994	1,868	2,457
State obligations.....	400	646	680	586	1,156	1,012	1,378	1,234	1,802
County and local rural obligations.....	90	205	190	169	158	194	178	184	190
Municipal obligations.....	162	323	336	315	366	427	488	450	465
Total debt redeemed <sup>2</sup> .....	322	421	616	855	915	965	1,103	1,137	1,198
State obligations.....	143	191	300	459	519	540	657	666	703
County and local rural obligations.....	83	89	96	123	126	136	141	146	150
Municipal obligations.....	96	141	220	273	270	289	305	325	345
Total debt outstanding.....	4,436	9,658	13,166	15,316	16,080	16,749	17,640	18,371	19,630
State obligations.....	2,098	6,619	9,384	10,905	11,542	12,014	12,735	13,303	14,402
County and local rural obligations.....	872	1,027	1,280	1,363	1,394	1,450	1,487	1,525	1,565
Municipal obligations.....	1,468	2,012	2,502	3,048	3,144	3,285	3,418	3,543	3,663

<sup>1</sup> Excludes refunding issues.

<sup>2</sup> Excludes redemptions by refunding.

Source: Dept. of Transportation, Federal Highway Administration; releases.

No. 834. DESIGNATED FEDERAL-AID HIGHWAY SYSTEMS, 1968, AND PROJECTS,  
1969—STATES AND PUERTO RICO

[Money figures in millions of dollars. Systems as of December 31, and projects as of June 30. Projects comprise those financed from the Federal-aid primary, secondary, urban, rural, and interstate funds. See text, pp. 533 and 534.]

STATE OR OTHER AREA	SYSTEMS (miles), 1968			PROJECTS, 1969 <sup>1</sup>						
	Primary		Secondary	Completed during fiscal year			Under construction			
	Total	National system of interstate highways		Miles	Total cost	Federal funds	Miles	Total cost	Federal funds	
Total	268,911	242,460	27,604	642,035	12,146	4,857.7	3,758.7	19,433	12,923.4	9,972.8
United States	268,363	42,460	27,604	640,907	12,134	4,842.2	3,751.4	19,393	12,888.7	9,956.7
Alabama	6,588	897	485	15,899	203	59.7	42.6	613	298.7	240.7
Alaska	3,345	—	—	2,173	147	37.1	34.9	122	69.8	65.7
Arizona	3,485	1,172	786	3,979	244	68.9	60.8	197	87.9	78.2
Arkansas	4,109	519	367	14,224	204	40.0	28.7	433	128.8	87.3
California	9,764	2,274	1,448	14,473	368	399.0	318.1	506	1,110.2	916.3
Colorado	4,611	976	645	4,241	234	51.9	39.1	259	158.4	129.8
Connecticut	1,318	347	261	1,246	22	56.6	47.0	22	180.6	133.4
Delaware	696	41	29	1,470	21	19.3	16.0	44	63.6	47.4
Dist. of Columbia	168	30	10	126	13	56.0	43.9	4	160.0	128.3
Florida	5,761	1,413	726	15,133	163	94.0	66.1	221	166.0	126.4
Georgia	9,111	1,147	650	20,482	341	145.5	112.9	817	353.2	259.4
Hawaii	605	52	12	510	(Z)	3.9	2.9	32	125.5	101.9
Idaho	3,349	612	397	5,722	132	38.8	33.5	472	93.0	75.8
Illinois	12,340	1,723	1,080	14,700	357	234.7	184.2	854	473.8	361.4
Indiana	5,980	1,129	776	18,997	157	168.6	137.4	274	278.9	210.4
Iowa	10,410	784	518	33,347	399	51.4	38.2	1,384	158.6	114.0
Kansas	7,843	821	650	24,410	542	44.6	26.8	811	150.1	107.3
Kentucky	4,606	1,174	477	15,191	228	136.4	112.8	200	229.4	170.0
Louisiana	3,438	703	307	8,843	152	78.6	61.1	260	555.5	458.0
Maine	1,973	312	276	2,526	54	19.3	10.9	60	41.5	28.7
Maryland	2,448	360	297	7,719	46	49.6	40.7	164	238.2	181.9
Massachusetts	2,417	467	386	2,296	71	135.9	113.8	70	332.4	260.9
Michigan	6,627	1,174	890	26,983	271	128.2	96.4	490	519.6	407.7
Minnesota	8,355	913	453	30,892	622	76.8	52.7	1,335	347.9	275.8
Mississippi	6,234	678	467	16,521	369	62.0	46.7	560	164.9	120.6
Missouri	8,982	1,146	827	23,168	207	90.4	67.7	447	321.4	242.8
Montana	6,107	1,186	504	5,825	275	79.2	61.7	308	122.7	102.9
Nebraska	5,932	480	373	17,912	297	28.8	18.8	366	72.2	52.5
Nevada	2,303	535	373	3,650	52	19.3	18.0	57	85.3	79.1
New Hampshire	1,254	215	171	1,742	23	19.3	15.0	47	47.2	35.0
New Jersey	2,342	385	186	2,242	74	132.3	100.3	99	548.9	394.9
New Mexico	4,005	998	684	5,912	174	51.3	42.2	200	79.3	69.0
New York	11,879	1,355	1,078	19,424	146	459.2	359.8	294	820.4	584.9
North Carolina	4,813	837	466	29,346	146	64.2	44.5	254	247.1	162.0
North Dakota	4,711	571	392	13,569	917	34.8	22.3	937	49.1	36.2
Ohio	8,408	1,534	1,133	21,495	181	213.5	157.0	389	588.8	451.9
Oklahoma	7,834	807	509	14,494	289	50.7	35.6	479	191.6	143.3
Oregon	4,065	736	649	8,384	78	44.0	36.1	82	183.7	137.8
Pennsylvania	8,551	1,580	1,160	13,692	184	332.0	258.5	458	815.3	616.4
Rhode Island	604	99	48	575	3	17.7	14.0	44	70.9	53.1
South Carolina	5,324	756	394	20,898	407	41.4	29.2	833	105.1	71.3
South Dakota	5,839	679	425	13,399	522	40.2	29.9	515	75.0	61.1
Tennessee	6,901	1,045	625	11,802	361	70.8	52.6	454	271.4	218.7
Texas	17,605	3,166	2,072	40,644	1,187	277.9	203.2	1,424	556.1	403.7
Utah	2,464	933	300	3,977	171	42.9	38.8	210	133.2	121.9
Vermont	1,582	320	173	1,894	61	43.4	36.0	69	54.1	42.1
Virginia	4,573	1,068	683	19,933	248	126.4	96.4	290	314.6	260.2
Washington	3,885	754	473	12,153	169	94.4	80.5	218	189.6	158.8
West Virginia	2,499	515	272	10,777	46	74.4	58.6	98	285.6	228.0
Wisconsin	6,514	563	417	19,186	273	89.1	65.2	382	124.1	76.2
Wyoming	3,806	914	654	2,612	233	47.8	41.3	235	54.1	45.7
Puerto Rico	548	—	—	1,128	14	15.8	7.7	39	34.7	16.0

<sup>1</sup> Represents zero. Z Less than 0.5 mile.

<sup>1</sup> Excludes highway planning and research work financed with 1½ percent Federal-aid highway funds available pursuant to 23 U.S.C. 307(c)(2). (Completed, \$64.1 million total cost, \$69.2 million Federal funds; underway, \$204.6 million total cost, \$158.5 million Federal funds.)

<sup>2</sup> Full authorization 42,500 miles. The 40-mile difference between full authorization and miles reported includes routes for which final locations are not yet determined.

Source: Dept. of Transportation, Federal Highway Administration; annual report, *Federal Aid and Allied Highway Programs*, 1969.

# State Highway Funds

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## No. 835. DISBURSEMENTS OF STATE HIGHWAY FUNDS—TOTAL 1950 TO 1968, AND BY PURPOSE, 1968, STATES

**[In millions of dollars.]** Comprises disbursements, whether from current revenues or proceeds of loans, for construction, maintenance, interest and principal payments on highway bonds, transfers to local units, and miscellaneous purposes. Includes transactions by State toll authorities. Beginning 1965, excludes amounts allocated for collection and nonhighway purposes, and bonds redeemed by refunding. See also *Historical Statistic, Colonial Times to 1957*, series Q 273-278]

STATE	1950	1955	1960	1965	1967	Total	1968			
							For State-administered highways			
							Capital outlay, roads and bridges <sup>1</sup>	Maintenance and traffic services <sup>1</sup>	Other <sup>2</sup>	
United States <sup>4</sup>	3,562	6,034	8,957	11,465	13,207	14,249	7,866	1,594	2,307	2,482
Alabama	49	87	174	228	232	250	114	23	35	78
Alaska	(NA)	(NA)	19	71	58	70	46	12	12	(z)
Arizona	20	33	72	106	150	144	87	11	16	30
Arkansas	46	55	95	119	143	151	82	19	23	27
California	268	558	786	1,110	1,236	1,321	772	73	154	322
Colorado	38	56	91	129	129	141	78	16	20	27
Connecticut	38	79	161	216	231	256	102	33	107	14
Delaware	32	26	36	87	81	75	34	11	28	2
Dist. of Columbia	11	24	48	42	62	66	(x)	(x)	(x)	66
Florida	93	152	316	316	371	329	201	37	72	19
Georgia	74	109	167	208	251	260	125	25	37	73
Hawaii	(NA)	(NA)	23	35	48	63	41	4	8	10
Idaho	19	27	44	66	55	67	35	9	7	16
Illinois	113	229	475	471	577	648	328	67	86	167
Indiana	69	200	241	286	334	375	186	54	47	88
Iowa	79	109	169	193	242	227	96	21	16	94
Kansas	50	110	109	134	128	147	70	25	27	25
Kentucky	67	102	138	223	330	362	239	43	65	15
Louisiana	71	115	204	240	286	273	140	34	52	47
Maine	24	65	62	80	81	80	36	22	19	3
Maryland	84	138	166	217	258	280	97	21	94	68
Massachusetts	98	203	237	284	293	320	151	33	125	11
Michigan	106	249	418	427	492	519	216	35	97	171
Minnesota	65	101	167	230	276	294	181	29	19	65
Mississippi	42	75	110	160	169	162	78	11	26	47
Missouri	53	105	165	241	232	255	157	50	27	21
Montana	22	30	54	86	75	84	65	9	4	6
Nebraska	36	59	95	97	105	107	50	11	9	37
Nevada	9	15	22	58	50	53	34	7	6	6
New Hampshire	14	30	50	51	58	62	32	14	14	2
New Jersey	188	303	221	291	388	500	306	41	127	26
New Mexico	26	39	64	101	85	98	66	16	9	7
New York	304	471	652	752	957	1,205	689	148	179	189
North Carolina	136	141	179	219	309	352	189	75	77	11
North Dakota	22	28	50	51	63	59	33	5	6	15
Ohio	147	383	523	661	724	808	432	57	135	184
Oklahoma	73	113	134	179	194	213	110	19	30	54
Oregon	50	79	113	185	166	159	73	17	21	48
Pennsylvania	279	350	424	667	798	929	576	144	142	67
Rhode Island	14	30	42	62	87	84	63	8	12	1
South Carolina	46	57	109	114	131	130	76	28	16	10
South Dakota	20	34	57	68	71	76	48	8	7	13
Tennessee	79	108	187	238	240	250	133	19	24	74
Texas	178	282	493	513	633	597	406	89	63	39
Utah	15	23	49	89	80	93	71	8	9	5
Vermont	10	17	43	53	71	75	48	9	10	8
Virginia	76	112	211	353	371	368	232	55	63	18
Washington	78	127	171	235	301	308	158	32	50	68
West Virginia	51	64	110	169	185	194	120	26	48	-
Wisconsin	68	105	171	189	233	243	114	25	21	83
Wyoming	14	22	44	65	67	67	50	6	6	5

<sup>1</sup> Represents zero. NA Not available. X Not applicable.

Z Less than \$500,000.

<sup>2</sup> Comprises following disbursements, in millions of dollars: Administration and miscellaneous, 627; highway law enforcement, 589; bond interest, 483; and bond redemption, 638. <sup>3</sup> Expenditures on county roads under State control in Ala. (10 counties), Del., N.C., Va. (all except 2 counties), and W. Va. included with those for State-administered highways.

<sup>4</sup> Prior to 1960, excludes Alaska and Hawaii.

Source: Dept. of Transportation, Federal Highway Administration; annual report, *Highway Statistics*.

## No. 836. FEDERAL AND STATE MOTOR-FUEL TAX—STATES: 1940 TO 1969

[Cents per gallon. Where 2 figures appear in a cell, the former is tax in effect at beginning of year, the latter is tax at end of year. See also *Historical Statistics, Colonial Times to 1957*, series Q 328-329]

STATE	1940	1950	1960	1965	1969 <sup>1</sup>	STATE	1940	1950	1960	1965	1969 <sup>1</sup>
Federal tax.....	1-1.5	1.5	4	4	4	Mississippi.....	6	6-7	4 7	4 7	4 8 7
State average <sup>2</sup> .....	3.96	4.65	5.94	6.41	6.84	Missouri.....	2	2	3	5	5
Alabama.....	6	6	7	7	7	Montana.....	5	6	4 6	4 6	4 6-5-7
Alaska.....	(3)	(3)	5-7	8	8	Nebraska.....	5	6-5	7	7-7.5	7.5
Arizona.....	5	5	5	6-7	7	Nevada.....	4	4.5	6	6	6
Arkansas.....	6.5	6.5	6.5	4 6.5-	4 7.5	New Hampshire.....	4	4	7	7	7
California.....	3	4.5	4 6	7-8-7	5 7	New Jersey.....	3	3	5	6	7
Colorado.....	4	6	6	6-7	6-7	New Mexico.....	5	7	6	6	7
Connecticut.....	3	4	6	6	7-8	New York.....	4	4	4 6	4 6	4 7
Delaware.....	4	5	5	6-7	7	North Carolina.....	6	7	7	7	7-9
Dist. of Columbia.....	2	4	6	6	7	North Dakota.....	4	4	6	6	6-7
Florida.....	7	7	7	7	7	Rhode Island.....	3	6-7	7	7	8
Georgia.....	6	7	6.5	6.5	6.5	South Carolina.....	6	6-7	7	7	7
Hawaii.....	4	4	6.5	6.5	6.5	Oklahoma.....	4	6.5	6.5	6.5	6.5
Idaho.....	5.1	6	6	6	6	Oregon.....	5	6	6	6	7
Illinois.....	3	3	5	5	6-7.5	Pennsylvania.....	4	5	5	7	7
Indiana.....	4	4	6	6	6-8	Rhode Island.....	3	6-7	7	7	7
Iowa.....	3	4	4 6	4 6-7	4 7	South Dakota.....	4	4	4 6	4 6	4 6-7
Kansas.....	3	5	4 5	4 5	4 5-5-7	Tennessee.....	7	7	7	7	7
Kentucky.....	5	7	7.7	7.7	7.7	Texas.....	4	4	4 5	4 5	4 5
Louisiana.....	7	9	7	7	7-8	Utah.....	4	4	6	6	6-7
Maine.....	4	6	7	7	7-8	Vermont.....	4	5	6.5	6.5	8
Maryland.....	4	5	6	7	7	Virginia.....	5	6	7-6-7	7	7-7
Massachusetts.....	3	3	5.5	5.5-6.5	6.5	Washington.....	5	6.5	7.5	7	9
Michigan.....	3	3	6	6	7	West Virginia.....	5	7	7	7	7
Minnesota.....	4-3	5	5	6	7	Wisconsin.....	4	4	6	6	7
						Wyoming.....	4	4	4 5	4 5	4 6-7

<sup>1</sup> In effect Dec. 31.

<sup>2</sup> Weighted average, based on net gallons taxed. Prior to 1960, excludes Alaska and Hawaii.

<sup>3</sup> No tax.

<sup>4</sup> Tax on diesel fuel, and usually other special fuels for highway vehicles, is higher than gasoline tax shown.

<sup>5</sup> State tax rate on liquefied petroleum gas per gallon is 6 cents in California and South Dakota, 8 cents in Mississippi, and 5 cents in Kansas.

<sup>6</sup> State tax rate per gallon is 8 cents in Hawaii County and 5 cents in other counties.

<sup>7</sup> Trucks or combinations with more than 2 axles pay motor-fuel tax rate of 9 cents per gallon in Kentucky and Virginia. (Prior to July 1960, the tax in Virginia was 8 cents.)

<sup>8</sup> State tax rate is 6 cents per gallon. Since July 1966, all counties have had option of levying an additional 1 cent tax.

Source: Dept. of Transportation, Federal Highway Administration; annual report, *Highway Statistics*.

## No. 837. MOTOR-VEHICLE TRAVEL, BY TYPE OF VEHICLE: 1940 TO 1968

[In millions of vehicle-miles, except averages. Prior to 1960, excludes Alaska and Hawaii. Estimates based on automatic traffic recorder data. Urban travel includes all travel in municipalities and most travel in urbanized areas. All other travel is classed as rural. See also *Historical Statistics, Colonial Times to 1957*, series Q 321-327]

ITEM	1940	1950	1955	1960	1965	1966	1967	1968 est.
<b>TYPE OF VEHICLE</b>								
Passenger vehicles.....	302,188	453,246	603,434	718,845	887,812	930,497	961,553	1,015,649
Rural.....	252,257	367,694	492,047	592,436	716,376	756,592	779,097	818,998
Urban.....	121,988	183,218	265,667	305,538	335,983	354,019	361,888	378,062
Passenger cars <sup>1</sup> .....	130,269	184,476	226,380	286,898	380,393	402,573	417,209	440,936
Rural.....	249,600	363,613	457,540	588,083	711,594	751,740	774,203	814,030
Urban.....	120,540	181,095	263,088	308,283	333,412	351,372	369,228	375,338
Buses.....	129,060	182,518	224,452	284,800	378,182	400,368	414,976	438,692
Rural.....	2,657	4,081	4,507	4,355	4,782	4,852	4,894	4,968
Urban.....	1,448	2,123	2,579	2,255	2,571	2,647	2,660	2,724
Trucks and combinations.....	49,931	90,552	111,387	126,409	171,436	173,905	182,456	196,651
Rural.....	30,207	56,780	70,486	81,722	102,789	106,701	114,172	124,298
Urban.....	19,724	33,772	40,901	44,687	68,647	67,204	68,284	72,353
<b>AVERAGE MILES PER VEHICLE</b>								
Passenger vehicles.....	9,129	9,078	9,400	9,474	9,810	9,407	9,420	9,507
Passenger cars.....	9,080	9,020	9,359	9,446	9,286	9,384	9,399	9,488
Buses.....	18,580	20,910	17,658	16,004	15,215	15,012	14,484	14,122
Trucks and combinations.....	10,626	10,776	10,697	10,583	11,587	11,207	11,268	11,571

<sup>1</sup> Includes taxicabs and motorcycles.

Source: Dept. of Transportation, Federal Highway Administration; annual report, *Highway Statistics*.

## No. 838. MOTOR VEHICLES—SUMMARY STATISTICS: 1950 TO 1969

[Number in thousands; money figures in millions of dollars. Excludes Alaska and Hawaii, except as noted]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969
<b>SALES, EXPORTS, IMPORTS, AND SCRAPAGE<sup>1</sup></b>								
Passenger car factory sales	6,666	7,920	6,675	9,306	8,598	7,437	8,822	8,224
4-door sedans	3,247	3,044	2,697	2,744	2,333	1,851	2,052	1,811
2-door sedans, coaches and coupes <sup>2</sup>	2,794	1,691	1,094	793	546	395	499	603
2-door and 4-door "hard-tops"	267	2,169	1,517	4,251	4,438	4,153	5,053	4,782
Convertibles (except "hard-top")	208	240	305	509	395	306	277	202
Station wagons <sup>3</sup>	142	759	1,059	1,001	881	727	938	821
Chassis	9	18	3	7	6	5	3	4
Truck and bus factory sales	1,337	1,249	1,194	1,732	1,731	1,539	1,896	1,919
Passenger cars (new), exported	153	254	145	205	261	366	415	417
Passenger cars (new), imported	21	57	444	559	913	1,021	1,620	1,847
Exports, value	794	1,367	1,411	2,197	2,474	2,888	3,628	4,116
Passenger cars (new)	179	380	235	393	564	812	972	1,011
Trucks and buses (new)	217	340	382	328	360	408	474	568
Rubber tires and tubes	47	82	77	55	50	41	54	53
Parts and access. (incl. used veh.)	350	565	717	1,421	1,499	1,628	2,128	2,484
Imports of new passenger cars, value	21	69	513	640	1,237	1,695	2,782	3,355
Vehicles scrapped <sup>4</sup>	3,234	4,392	4,783	7,070	6,856	7,331	(N.A.)	(N.A.)
Passenger cars <sup>4</sup>	2,598	3,773	4,200	6,163	6,000	6,327	(N.A.)	(N.A.)
Trucks and buses <sup>4</sup>	636	619	583	907	856	1,004	(N.A.)	(N.A.)
<b>PARTS AND CHEMICAL SHIPMENTS</b>								
Tires, passenger car, <sup>6</sup> total	84,423	93,730	105,687	148,497	150,957	150,979	173,628	177,370
Original equipment	36,678	42,574	36,278	51,413	47,382	49,827	49,873	46,206
Replacement	47,103	50,189	68,475	94,893	101,812	108,499	121,088	129,310
Export	642	966	934	2,191	1,783	1,653	2,667	1,834
Tires, truck and bus, <sup>6</sup> total	15,164	14,769	13,911	20,440	22,664	21,756	25,277	27,406
Original equipment	4,671	4,800	3,925	6,943	7,401	6,873	8,488	9,498
Replacement	9,705	9,057	9,210	12,819	14,613	14,418	16,257	17,340
Export	788	912	776	678	650	465	532	569
Replacement automobile batteries <sup>7</sup>	24,442	25,828	26,329	30,528	32,124	32,061	\$ 34,960	\$ 36,586
Sealed-beam lamps <sup>8</sup>	35,776	44,911	67,416	\$ 85,566	\$ 82,664	\$ 75,106	\$ 88,543	\$ 74,000
Other automotive lamps <sup>8</sup>	251,216	331,448	323,449	\$ 522,608	\$ 535,912	\$ 517,676	\$ 598,399	\$ 617,412
Antifreeze <sup>10</sup>	1,000 gal	(N.A.)	110,000	120,902	143,067	140,261	143,690	153,576
Heavy duty brake fluid <sup>10</sup> , 1,000 gal <sup>11</sup>	(N.A.)	5,682	9,426	7,983	8,986	9,552	10,325	(N.A.)
<b>SPECIAL MOTOR-VEHICLE TAXES<sup>12</sup></b>								
Federal excise <sup>13</sup>	1,479	2,736	4,397	5,716	5,424	5,524	6,055	6,730
State motor veh. and carrier receipts <sup>14</sup>	948	1,483	1,926	2,512	2,761	2,894	3,161	3,365
State motor-fuel, net <sup>14</sup>	1,667	2,543	3,396	4,495	4,758	5,008	5,470	5,976
<b>MOTOR VEHICLE REGISTRATIONS<sup>15</sup></b>								
World	70,424	95,896	126,908	177,995	190,306	205,949	216,608	(N.A.)
United States <sup>14</sup>	49,161	62,689	73,869	90,360	94,193	99,958	101,039	\$ 104,702
Other North and Central America	3,154	4,942	6,759	8,235	9,160	9,517	10,169	(N.A.)
South America	1,270	1,835	2,995	5,103	5,573	6,122	6,644	(N.A.)
Europe	12,529	19,611	33,751	56,483	61,097	66,977	72,191	(N.A.)
Africa	1,241	1,829	2,450	3,394	3,509	3,759	4,029	(N.A.)
Asia	1,221	2,212	3,556	9,739	11,817	14,477	17,175	(N.A.)
Oceania	1,848	2,778	3,528	4,681	4,957	5,138	5,361	(N.A.)

NA. Not available.

<sup>1</sup> Source: Exports and imports from Dept. of Commerce.<sup>2</sup> Includes business coupes.<sup>3</sup> Excludes station wagons on commercial vehicle chassis. <sup>4</sup> Estimated. <sup>5</sup> Includes Alaska and Hawaii.<sup>6</sup> Source: The Rubber Manufacturers Association, Inc., New York, N.Y. Beginning 1965, figures for "Tires, passenger car" include motorcycle tires.<sup>7</sup> Source: Association of American Battery Manufacturers, Burlingame, Calif. <sup>8</sup> Preliminary.<sup>9</sup> Source: Bureau of the Census. <sup>10</sup> Source: Chemical Specialties Manufacturers Association, Inc., New York, N.Y.<sup>11</sup> Figures represent fluid compounded rather than sold.<sup>12</sup> Special taxes on motor-vehicle users. Excludes income and property taxes on motor vehicle, body, parts and tire factories; garages; dealers; repair shops; terminal and truck, including taxicab and bus, operating companies.<sup>13</sup> Source: Dept. of the Treasury and Dept. of Transportation. Includes amounts collected on use of vehicles over 26,000 pounds as follows, in millions of dollars: 1960, 45; 1965, 103; 1966, 106; 1967, 108; 1968, 118; and 1969, 130.<sup>14</sup> Source: Dept. of Transportation.<sup>15</sup> Includes cars, trucks, and buses. Source: Dept. of State and overseas sources.Source: Automobile Manufacturers Association, Detroit, Mich.; *Automobile Facts and Figures*. Includes data compiled from sources cited in footnotes.

**No. 839. MOTOR VEHICLES—FACTORY SALES AND REGISTRATIONS: 1900 TO 1969**  
 [Prior to 1960, registrations exclude Alaska and Hawaii, except as noted. See also *Historical Statistics, Colonial Times to 1957*, series Q 310-317]

YEAR	FACTORY SALES <sup>1</sup>						REGISTRATIONS <sup>3</sup> (1,000)			
	Number (1,000)			Wholesale value <sup>2</sup>			Total cars, trucks, buses	Passenger cars and taxis <sup>6</sup>	Trucks and buses <sup>8</sup>	Motorcycles
	Total cars, trucks, buses	Pas-sen-ger cars	Trucks and buses <sup>2</sup>	Passenger cars	Trucks and buses <sup>2</sup>	Total (mil. dol.)	Aver-age <sup>4</sup>	Total (mil. dol.)	Aver-age <sup>4</sup>	
1900	4	4	—	5	\$1,250	—	—	8	—	—
1910	187	181	6	215	1,188	10	\$1,667	7,470	458	10
1920	2,227	1,906	322	1,809	949	423	1,314	7,9,251	8,131	1,108
1930	3,363	2,787	575	1,644	590	391	680	7,26,794	23,035	3,715
1940	4,472	3,717	755	2,371	638	568	752	7,32,525	27,466	4,987
1950	8,003	6,666	1,337	8,468	1,270	1,708	1,277	7,49,300	40,339	8,823
1960	7,869	6,675	1,194	12,164	1,822	2,351	1,969	73,869	61,682	12,187
1965	11,057	9,306	1,752	18,380	1,975	3,734	2,131	90,358	75,258	15,100
1966	10,329	8,598	1,731	17,554	2,042	3,953	2,284	94,193	78,354	15,839
1967	8,976	7,437	1,539	15,653	2,105	3,592	2,334	96,931	80,414	16,517
1968	10,718	8,822	1,896	19,352	2,194	4,670	2,463	101,039	83,693	17,346
1969	10,143	8,224	1,919	18,700	2,274	5,000	2,606	104,702	86,560	18,142

<sup>1</sup> Represents zero.<sup>2</sup> Beginning 1965, excludes tactical vehicles. A substantial part of the trucks and buses reported comprises chassis without body; hence, excludes the value of bodies for these chassis.<sup>3</sup> Beginning 1940, includes value of standard equipment.<sup>4</sup> Averages do not indicate price changes since total values may reflect changes in number of makes, models, and/or body types from year to year.<sup>5</sup> Includes publicly owned vehicles. Excludes vehicles owned by military services.<sup>6</sup> Prior to 1930, buses included with passenger cars.<sup>7</sup> Total includes, components exclude, Hawaii.<sup>8</sup> Estimate.Source: Factory sales—Automobile Manufacturers Association, Detroit, Mich.; *Automobile Facts and Figures*. Registrations—Dept. of Transportation, Federal Highway Administration; annual report, *Highway Statistics*.

**No. 840. MOTOR VEHICLES—ESTABLISHMENTS, SALES, PAYROLL, AND EMPLOYMENT FOR SELECTED KINDS OF BUSINESS: 1963 AND 1967**

KIND OF BUSINESS	ESTABLISH-MENTS <sup>1</sup> (1,000)		SALES OR RE-CIPTS <sup>2</sup> (mil. dol.)		ANNUAL PAYROLL <sup>3</sup> (mil. dol.)		PAID EM-PLOYEES <sup>4</sup> (1,000)	
	1963	1967	1963	1967	1963	1967	1963	1967
RETAIL TRADE								
Automotive dealers								
Motor vehicle dealers—new and used cars	98.5	105.5	45,376	55,631	4,111	5,257	794.2	906.6
Motor vehicle dealers—used cars only	33.3	(5)	37,375	(5)	3,326	4,232	612.1	696.3
Tire, battery, and accessory dealers	28.0	(5)	3,087	(5)	184	185	44.3	38.6
Misc. automotive dealers	25.9	29.2	3,336	4,236	474	604	110.5	129.6
Gasoline service stations	11.3	14.3	1,579	2,760	127	236	27.2	42.2
WHOLESALE TRADE								
Motor vehicles and auto equipment								
Automobiles and other motor vehicles	29.4	31.2	36,789	46,122	1,671	2,127	295.7	341.1
Automotive equipment	4.6	4.8	25,958	31,330	507	641	79.9	91.9
Tires and tubes	22.7	23.3	8,644	11,614	1,019	1,261	191.2	214.1
SERVICES								
Auto repairs, services, and garages								
Automobile repair shops	139.6	139.2	5,444	7,028	1,135	1,468	288.0	316.2
Automobile parking	114.5	109.9	3,588	4,086	778	943	184.4	187.9
Car, truck rental and leasing; other serv	11.3	10.6	416	484	114	129	34.9	33.5
MANUFACTURING	13.9	18.7	1,440	2,459	242	395	68.7	94.8
Motor vehicles and equipment								
Motor vehicles	2.8	2.7	12,781	13,778	5,194	5,953	694	743
Motor vehicle parts and accessories	2.0	1.7	12,346	7,406	4,947	2,690	650	320
Truck and bus bodies	0.6	0.6	230	333	133	193	25	30
Truck trailers	0.2	0.2	206	289	113	147	19	23

<sup>1</sup> As of Dec. 31; except for manufacturing and wholesale trade, represents only establishments employing one or more workers at any time during the year.<sup>2</sup> For manufacturing, data represent value added in manufacture. Comprises salaries, wages, commissions, bonuses, vacation pay, and other remuneration.<sup>3</sup> Work week ended nearest Nov. 15, 1963, and week including Mar. 12, 1967, except quarterly average for manufacturing.<sup>4</sup> Data not provided. Establishments with no payroll are classified only at next broader kind of business.Source: Dept. of Commerce, Bureau of the Census; 1967 *Census of Business*, Vols. II, VI, and VIII and 1967 *Census of Manufactures*, preliminary reports, MC67(P)-37A-3, MC67(P)-37A-4, and MC67(P)-37A-5.

# Motor Vehicles

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## No. 841. MOTOR-VEHICLE REGISTRATIONS, 1950 TO 1969, AND DRIVERS LICENSES, 1968, BY STATES

[In thousands, except as indicated. Motor-vehicle registrations include publicly owned vehicles; for uniformity, figures have been adjusted to a calendar-year basis as registration years in States differ; figures represent net numbers where possible, excluding re-registrations and nonresident registrations]

STATE	AUTOMOBILES, TRUCKS, AND BUSES						Motor- cycles (incl. official), <sup>1</sup> 1969	DRIVERS LICENSES, 1968			
	1969				Private and commercial			Total	Percent		
	1950	1955	1960	1965	Auto- mobiles (incl. taxicabs)	Trucks and buses			Male drivers	Drivers under 25 years	
U.S. <sup>2</sup>	49,300	62,870	73,869	90,358	105,404	86,710	17,155	2,309.1	105,392	58.1 (NA)	
Ala.	686	1,041	1,282	1,663	1,860	1,466	384	33.4	1,614	58.0 (NA)	
Alaska	(NA)	(NA)	81	109	131	90	36	6.4	115	55.0 23.0	
Ariz.	271	415	624	825	1,024	776	228	27.7	1,004	54.5 26.7	
Ark.	477	584	708	914	950	654	284	18.5	1,051	58.0 (NA)	
Calif.	4,620	6,189	7,799	9,989	11,601	9,627	1,811	476.2	11,324	58.1 18.4	
Colo.	564	737	924	1,158	1,374	1,042	308	34.8	1,261	61.0 27.6	
Conn.	716	921	1,107	1,415	1,677	1,483	217	23.7	1,983	68.0 18.7	
Del.	108	154	192	244	297	248	44	3.8	312	55.4 21.7	
D.C.	195	197	206	236	254	227	18	3.5	343	63.4 21.4	
Fla.	985	1,616	2,367	3,037	3,895	3,365	476	75.7	3,425	57.8 (NA)	
Ga.	898	1,239	1,512	1,990	2,487	1,993	468	42.1	2,279	58.0 (NA)	
Hawaii	138	181	231	310	375	330	39	8.6	375	58.1 (NA)	
Idaho	272	338	375	434	477	323	140	24.0	473	59.8 (NA)	
Ill.	2,651	3,268	3,776	4,437	5,162	4,487	617	102.5	5,972	57.9 21.2	
Ind.	1,435	1,763	2,046	2,427	2,975	2,418	531	70.7	2,573	55.2 21.9	
Iowa	1,072	1,195	1,325	1,549	1,754	1,361	364	48.3	1,598	57.8 19.7	
Kans.	853	1,048	1,163	1,369	1,515	1,104	387	39.8	1,396	53.6 24.0	
Ky.	784	1,032	1,198	1,500	1,713	1,398	352	24.3	1,477	62.1 21.5	
La.	707	952	1,177	1,442	1,750	1,380	347	25.1	1,677	58.0 (NA)	
Maine	276	323	374	424	496	396	93	7.7	491	56.5 19.7	
Md.	685	938	1,155	1,481	1,795	1,561	216	22.0	1,925	57.0 21.5	
Mass.	1,280	1,546	1,803	2,104	2,426	2,172	293	33.4	2,850	57.9 19.6	
Mich.	2,433	3,114	3,306	3,991	4,488	3,833	588	131.8	4,572	58.7 21.9	
Minn.	1,169	1,365	1,592	1,890	2,144	1,710	408	61.7	2,078	57.3 21.6	
Miss.	484	637	723	921	1,085	798	271	13.9	1,010	61.1 17.9	
Mo.	1,261	1,490	1,720	2,058	2,313	1,825	465	30.6	2,450	56.5 21.9	
Mont.	265	331	373	429	478	310	158	19.7	392	57.6 25.9	
Nebr.	569	662	734	849	928	672	241	24.5	886	56.1 (NA)	
Nev.	77	124	175	266	329	246	71	15.8	327	56.1 19.4	
N.H.	172	212	267	331	377	317	54	7.2	390	57.1 21.2	
N.J.	1,579	2,061	2,401	2,980	3,490	3,113	321	36.4	3,733	56.6 18.3	
N. Mex.	238	340	426	525	611	436	161	18.6	540	54.5 (NA)	
N.Y.	3,735	4,643	5,067	5,939	6,505	5,792	614	85.2	7,983	59.6 17.6	
N.C.	1,056	1,437	1,720	2,156	2,717	2,126	516	37.5	2,548	56.7 24.7	
N. Dak.	276	309	345	396	420	264	147	10.0	333	57.7 24.8	
Ohio	2,795	3,526	4,087	4,935	5,875	5,218	602	112.1	5,860	60.3 19.7	
Oklahoma	831	1,026	1,184	1,438	1,650	1,172	453	42.1	1,461	56.5 24.9	
Oreg.	689	802	919	1,119	1,335	1,080	227	45.4	1,157	59.7 16.3	
Pa.	3,010	3,737	4,287	4,968	5,760	5,007	693	110.3	6,076	59.9 20.8	
R.I.	251	308	341	406	470	415	50	8.0	480	58.8 (NA)	
S.C.	579	782	879	1,094	1,311	1,061	227	14.0	1,326	60.9 28.9	
S. Dak.	290	325	354	398	418	286	122	10.8	398	57.9 24.2	
Tenn.	858	1,102	1,307	1,655	1,971	1,576	365	35.3	2,010	56.0 18.7	
Tex.	2,968	3,866	4,457	5,610	6,506	4,994	1,417	110.4	5,627	56.4 22.7	
Utah	247	336	417	525	601	464	125	20.5	513	54.9 (NA)	
Vt.	121	136	152	175	215	178	33	6.2	224	58.8 (NA)	
Va.	918	1,243	1,426	1,800	2,161	1,801	321	24.6	2,307	58.4 21.0	
Wash.	924	1,164	1,377	1,659	2,106	1,638	430	43.9	1,788	57.4 21.3	
W. Va.	482	552	601	696	836	659	165	22.7	928	60.4 22.9	
Wis.	1,201	1,386	1,600	1,839	2,075	1,728	311	49.2	2,361	57.3 23.0	
Wyo.	145	174	207	225	238	152	80	8.4	216	59.8 (NA)	

NA. Not available.

<sup>1</sup> Excludes vehicles owned by military services.

<sup>2</sup> Estimated from data reported by States for current and previous years; allowance has been made for deaths, emigration, or revocation by some States.

<sup>3</sup> Incomplete data for some States.

Source: Dept. of Transportation, Federal Highway Administration; annual reports, *Highway Statistics*, *Drivers Licenses*—1968, and unpublished data.

## No. 842. NEW PASSENGER CAR PRODUCTION AND IMPORTS: 1962 TO 1969

ITEM	1962	1963	1964	1965	1966	1967	1968	1969
Value of production:								
Gross auto product <sup>1</sup> .....bil. dol.	22.5	25.1	25.8	31.8	30.0	28.6	35.9	36.6
Gross national product <sup>2</sup> .....bil. dol.	560.3	590.5	632.4	684.9	749.9	793.5	865.7	932.1
Gross auto product as percent of GNP.....	4.0	4.3	4.1	4.6	4.0	3.6	4.1	3.9
Production and imports:								
Total.....1,000 units.....	7,319	8,053	8,261	9,894	9,518	8,434	10,469	10,069
Domestic production.....1,000 units.....	6,943	7,644	7,745	9,335	8,605	7,413	8,849	8,224
Imports.....1,000 units.....	376	409	516	559	913	1,021	1,620	1,845
Percent of total.....	5.1	5.1	6.2	5.6	9.6	12.1	15.5	18.3

<sup>1</sup> Value of domestically produced cars plus net value added by distribution of new, used, and imported cars.<sup>2</sup> For definition, see text, p. 309.

Source: Dept. of Commerce, Bureau of the Census and Office of Business Economics, unpublished data.

## No. 843. AUTOMOBILE OWNERSHIP, AGE, AND FINANCING: 1950 TO 1969

[Excludes Alaska and Hawaii. For definition of family unit, see headnote, table 490]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969
Total number of families in U.S. <sup>1</sup> .....millions.....	45.2	49.1	53.4	58.4	59.1	60.2	61.2	62.1
Families owning automobiles.....percent.....	59	70	77	79	79	78	79	79
Owning 1 automobile.....percent.....	52	60	62	55	54	53	53	52
Owning 2 or more automobiles.....percent.....	7	10	15	24	25	25	26	27
Automobiles owned, by age: <sup>2</sup>								
Less than 2 years old.....percent.....	17	12	14	16	16	17	14	15
2 and 3 years old.....percent.....	19	22	20	21	22	22	24	22
4 - 7 years old.....percent.....	6	43	41	33	34	33	36	41
8 years old and over.....percent.....	58	23	25	30	28	28	26	22
Total automobiles purchased <sup>3</sup> .....millions.....		(13.6	14.1	18.3	19.3	19.1	19.2	20.5
New cars.....millions.....		4.4	5.2	7.2	7.9	7.6	6.9	7.5
Average price paid.....dollars.....	(NA)	2,730	3,140	3,140	3,260	3,250	3,290	3,510
Used cars.....millions.....		9.2	9.1	11.1	11.4	11.5	12.3	13.0
Average price paid, gross.....dollars.....		780	980	920	910	880	1,050	1,000
Method of financing purchases:								
All passenger cars <sup>4</sup> .....percent.....	100	100	100	100	100	100	100	100
Full cash (including trade-in allowance).....percent.....	47	38	38	48	48	48	42	47
Installment credit and other borrowing.....percent.....	52	60	62	52	52	52	58	53
New passenger-car buyers <sup>4</sup> .....percent.....	100	100	100	100	100	100	100	100
Full cash (including trade-in allowance).....percent.....	54	39	33	40	37	38	31	34
Installment credit and other borrowing.....percent.....	46	60	67	60	63	62	69	66
Used passenger cars <sup>4</sup> .....percent.....	100	100	100	100	100	100	100	100
Full cash (including trade-in allowance).....percent.....	41	37	41	53	52	53	50	51
Installment credit and other borrowing.....percent.....	57	60	59	47	48	47	50	49

<sup>1</sup> Not available.<sup>2</sup> Age is determined by subtracting model year from year of survey.<sup>3</sup> Covers family units buying cars during preceding calendar year and still owning them at time of survey (January–February of year indicated).<sup>4</sup> Refers to purchases during preceding year. Includes cars received as gifts, whether cash or credit purchased.

Buyers for whom method of financing was not ascertained are excluded from the detail on purchases.

Source: The University of Michigan, Survey Research Center, Ann Arbor, Mich.; *Survey of Consumer Finances*.

## No. 844. AUTOMOBILES—FACTORY INSTALLED EQUIPMENT: 1956 TO 1969

[Refers to model-year production. For certain items, such as air conditioning, a significant number of units are installed on new vehicles after they leave the factory]

EQUIPMENT	UNITS INSTALLED (1,000)					PERCENT OF CARS PRODUCED				
	1956	1960	1965	1968	1969	1956	1960	1965	1968	1969
Automatic transmission.....	4,709	4,306	7,134	7,250	7,479	74.8	71.6	80.7	89.1	90.3
Manual transmission.....	1,586	1,706	1,709	878	800	25.2	28.4	19.3	10.8	9.7
V-8 engine.....	5,122	3,409	6,492	7,026	7,359	81.4	56.7	73.4	86.4	88.9
6-cylinder engine.....	1,173	2,603	2,350	1,107	915	18.6	43.3	26.6	13.6	11.1
Power brakes.....	1,529	1,948	2,856	3,653	4,512	24.3	32.4	32.3	44.9	54.5
Power steering.....	1,720	2,357	5,270	6,293	6,987	27.3	39.2	59.6	77.4	84.4
Power windows <sup>1</sup> .....	412	376	1,261	1,430	1,438	6.6	6.3	13.3	17.6	17.4
Air conditioning.....	164	414	2,061	3,519	4,471	2.6	6.9	23.3	43.3	54.0
Tinted glass <sup>2</sup> .....	1,988	1,668	4,572	5,194	5,774	31.6	27.7	51.7	63.9	69.7

<sup>1</sup> Includes power operated station wagon rear windows.<sup>2</sup> Covers windshield and other glass.Source: *Annual Statistical Issue, Automotive Industries*. Published by Chilton Company, Philadelphia, Pa. (Copyright.)

# Automobiles

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## No. 845. HOUSEHOLD EXPENDITURES ON NEW AND USED CARS: 1967 TO 1970

[Seasonally adjusted. Annual figures are averages of quarterly rates. Expenditures and prices are net of trade-in allowances and State and Federal taxes. Based on sample]

YEAR AND QUARTER	PURCHASES PER 100 HOUSEHOLDS		EXPENDITURES, ANNUAL RATE (bil. dol.)			AVERAGE PRICE (dollars)	
	New cars	Used cars	Total	New cars	Used cars	New car	Used car
1967	11.9	22.0	30.5	19.4	11.0	2,731	840
1968	13.1	21.9	35.1	23.2	11.9	2,912	888
1969	12.9	20.6	36.5	24.5	12.0	3,031	941
1970, Jan.-Mar.	2.7	5.1	33.8	21.7	12.1	3,067	911

Source: Dept. of Commerce, Bureau of the Census; *Current Population Reports*, Series P-65, Nos. 24, 25, and 30

## No. 846. ESTIMATED COST OF OPERATING AN AUTOMOBILE: 1960, 1968, AND 1970

[1970 estimates were based on a 4-door sedan, costing \$3,374, including \$189 Federal excise tax, with an assumed life-span of 10 years, 100,000 miles. Similar specifications were used in 1960 and 1968]

ITEM	10 YEAR TOTAL COSTS			CENTS PER MILE COST, 1970 (January)					
	1960 (Oct.)	1968 (Jan.)	1970 (Jan.)	10-	1st	3d	5th	7th	10th
				year aver- age	year (14,500 miles)	year (11,500 miles)	year (9,900 miles)	year (9,500 miles)	year (5,700 miles)
<b>Total</b> .....	<b>\$9,761</b>	<b>\$11,024</b>	<b>\$11,890</b>	<b>11.89</b>	<b>14.21</b>	<b>12.10</b>	<b>11.50</b>	<b>12.02</b>	<b>10.82</b>
Costs excluding taxes.....	8,595	9,852	10,537	10.54	11.93	10.88	10.32	10.88	9.56
Depreciation.....	2,542	2,806	3,185	3.19	6.59	3.92	2.60	1.63	.88
Repairs and maintenance <sup>1</sup> .....	1,722	1,788	1,521	1.52	.50	1.59	1.74	3.40	.53
Replacement tires and tubes <sup>2</sup> .....	181	232	385	.39	.12	.12	.39	.44	.82
Accessories <sup>3</sup> .....	140	82	.03	.01	.01	.01	.01	.05	.06
Gasoline <sup>4</sup> .....	1,453	1,497	1,733	1.73	1.73	1.73	1.73	1.73	1.73
Oil <sup>4</sup> .....	187	227	158	.16	.11	.13	.16	.19	.22
Insurance <sup>5</sup> .....	1,290	1,415	1,722	1.72	1.44	1.73	1.87	1.57	2.61
Garaging, parking, tolls, etc. <sup>6</sup> .....	1,080	1,805	1,805	1.80	1.43	1.65	1.82	1.88	2.71
Taxes and fees <sup>7</sup> .....	1,166	1,172	1,353	1.35	2.28	1.22	1.18	1.14	1.26

<sup>1</sup> For 1970, includes lubrication, washing, and waxing; replacement of spark plugs, points and condenser, wiper blades, fan belt, radiator hoses, etc.; starter, water pump, and brake overhaul; universal joint replacement, etc.; and major repair such as a complete "valve job."

<sup>2</sup> For 1970, covers 7 new regular tires and 4 new snow tires during life of car.

<sup>3</sup> For 1970, includes a set of vinyl floor mats and seat covers.

<sup>4</sup> For 1970, gasoline use set at 13.8 miles per gallon; oil use associated with gasoline at rate of 1 to 128.

<sup>5</sup> For 1970, includes \$60,000 combined public liability, property damage, \$1,000 medical, and comprehensive for full 10 years; uninsured motorist coverage, and \$100 deductible collision insurance assumed for first 5 years.

<sup>6</sup> For 1970, includes monthly charges of \$10 for garage rental or cost of owner's garaging facility, parking fee average of \$54 per year, and toll average of \$6.50 per year.

<sup>7</sup> For 1970, includes Federal gasoline tax of 4 cents and Maryland gasoline tax of 7 cents per gallon; Maryland registration fee of \$20 and titling tax at 4 percent of retail price; and Federal excise taxes on motor vehicles, tires, and oil. Total taxes include property and oil taxes.

Source: Dept. of Transportation, Federal Highway Administration; *Cost of Operating an Automobile*.

## No. 847. AUTOMOBILE INSURANCE: 1950 TO 1968

[Money figures in millions of dollars. Prior to 1960, excludes Alaska and Hawaii. 1950, net basis; 1955, direct writing basis; 1960 and 1965, direct premiums earned and direct losses incurred]

ITEM	1950	1955	1960	1965	1966	1967	1968
<b>Total insurance:</b>							
Premiums written.....	2,625	4,644	6,448	8,358	10,008	10,800	11,693
Losses paid.....	1,069	2,122	3,645	5,221	5,235	5,814	6,642
Percent losses paid of premiums written.....	40.7	45.7	56.5	62.5	52.3	53.8	56.8
<b>Automobile liability, bodily injury:</b>							
Premiums written.....	931	1,735	2,841	3,948	4,610	4,991	5,383
Losses paid.....	396	820	1,697	2,459	2,351	2,580	2,802
Percent losses paid of premiums written.....	42.5	47.3	59.7	62.3	51.0	51.7	52.1
<b>Automobile liability, property damage:<sup>1</sup></b>							
Premiums written.....	482	896	1,219	1,567	1,894	2,091	2,280
Losses paid.....	231	415	675	1,025	1,090	1,224	1,416
Percent losses paid of premiums written.....	47.9	46.3	55.4	65.4	59.6	58.5	62.1
<b>Physical damage:<sup>2</sup></b>							
Premiums written.....	1,212	2,013	2,388	2,843	3,504	3,718	4,030
Losses paid.....	442	887	1,273	1,737	1,794	2,011	2,424
Percent losses paid of premiums written.....	36.5	43.6	53.3	61.1	51.2	54.1	60.1

<sup>1</sup> Covers real property against damage by autos. <sup>2</sup> Covers auto fire, theft, collision, and comprehensive.

Source: The Spectator, Philadelphia, Pa.; 1950, *Insurance Yearbook*; 1955 through 1965, *Insurance by States*; thereafter, *Property Liability Insurance Review*. (Copyright.)

## No. 848. MOTOR FUEL CONSUMPTION, BY USE: 1940 TO 1968

[In millions of gallons, except averages. Prior to 1960, excludes Alaska and Hawaii. Comprises gasoline and all other fuels under State motor fuel laws. Excludes exports and Federal purchases for military use. Obtained chiefly from reports of State authorities. See *Historical Statistics, Colonial Times to 1967*, series Q 318-320, for highway and nonhighway usage.]

ITEM	1940	1945	1950	1955	1960	1965	1966	1967	1968
Total consumption <sup>1</sup>	24,404	22,304	40,280	53,116	63,714	71,104	74,623	77,693	82,938
Passenger vehicles									
Passenger cars <sup>2</sup>	16,759	14,023	25,037	34,319	41,996	51,169	54,208	56,020	59,456
Buses <sup>3</sup>	16,323	13,323	24,305	33,548	41,169	50,275	53,312	55,110	58,524
Trucks and combinations	5,436	700	732	771	827	894	896	910	932
Trucks and combinations	5,166	5,055	10,566	13,308	15,882	19,935	20,415	21,673	23,482
Average gallons consumed per vehicle	678	617	728	759	777	775	778	786	804
Passenger cars <sup>2</sup>	594	517	603	644	661	656	666	668	682
Buses <sup>3</sup>	3,049	4,294	3,752	3,021	3,040	2,844	2,772	2,693	2,649
Trucks and combinations	1,097	1,020	1,257	1,278	1,330	1,347	1,316	1,338	1,382
Average mileage per gallon, per vehicle	13.80	13.11	12.87	12.67	12.42	12.49	12.47	12.38	12.25
Passenger cars <sup>2</sup>	15.29	15.04	15.95	14.53	14.28	14.15	14.10	14.05	13.91
Buses <sup>3</sup>	6.09	5.48	5.57	5.85	5.26	5.35	5.42	5.38	5.33
Trucks and combinations	9.68	9.09	8.57	8.37	7.96	8.60	8.52	8.42	8.37

<sup>1</sup> Through 1960, includes nonhighway usage and losses allowed for evaporation, handling, etc.; thereafter, highway usage only. <sup>2</sup> Includes taxicabs and motorcycles. <sup>3</sup> Includes school buses.

Source: Dept. of Transportation, Federal Highway Administration; annual report, *Highway Statistics*.

## No. 849. SPEED OF MOTOR VEHICLES: 1945 TO 1968

[Excludes Alaska and Hawaii. Based on actual speed of each vehicle recorded on tangent sections of main rural highways during off-peak hours]

ITEM	1945 <sup>1</sup>	1950	1955	1960	1962	1963	1964	1965	1966	1967	1968
Number of vehicles recorded...1,000...	96	280	395	459	602	539	569	552	519	478	480
Average speed, all vehicles...m.p.h...	44.0	47.6	50.7	52.6	53.8	55.8	55.9	56.4	57.3	58.0	59.0
Passenger cars.....m.p.h.	45.0	48.7	52.1	53.8	55.1	57.1	57.2	57.8	58.8	59.5	60.4
Trucks.....m.p.h.	39.8	43.0	45.8	48.2	49.4	51.3	51.0	51.8	52.6	53.1	54.0
Buses.....m.p.h.	45.5	49.8	52.6	55.5	56.0	58.1	57.8	57.4	58.8	59.4	60.5
Vehicles exceeding—											
40 m.p.h.....percent.	64	77	87	92	93	95	95	95	96	96	97
45 m.p.h.....percent.	42	58	73	80	84	88	87	88	89	91	92
50 m.p.h.....percent.	24	37	51	58	64	72	71	73	76	79	81
55 m.p.h.....percent.	11	20	31	37	43	52	53	56	59	64	66
60 m.p.h.....percent.	5	8	15	16	21	29	32	34	40	44	45
65 m.p.h.....percent.	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	24	26
70 m.p.h.....percent.	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	(N/A)	12	12

NA. Not available. <sup>1</sup> Aug. 15 to Dec. 31.

Source: Dept. of Transportation, Federal Highway Administration; *Traffic Speed Trends*, and unpublished data.

## No. 850. CARS AND TRUCKS IN USE, BY AGE: 1955 TO 1969

[As of July 1. Prior to 1960, excludes Alaska and Hawaii. Excludes vehicles for which age was not known]

AGE	1955		1960		1965		1968		1969	
	Number (1,000)	Percent								
Total cars <sup>1</sup>	47,123	100.0	56,935	100.0	68,935	100.0	75,295	100.0	78,445	100.0
Under 3 years.....	14,448	30.7	14,186	24.9	21,578	31.3	23,140	30.7	23,449	29.9
3-5 years.....	15,164	32.2	18,346	32.2	18,013	26.1	23,664	31.4	25,185	32.1
6-8 years.....	10,146	21.5	12,380	21.7	13,571	19.7	15,454	20.5	16,720	21.3
9-11 years.....	9,199	16.2	9,862	14.3	7,045	9.4	7,365	9.4	7,365	9.4
12 years and over.....	7,365	15.6	2,825	5.0	5,911	8.6	5,991	8.0	5,727	7.3
Total trucks <sup>1</sup>	9,111	100.0	10,771	100.0	13,106	100.0	15,652	100.0	16,573	100.0
Under 3 years.....	2,039	22.4	2,046	19.0	3,222	24.6	4,022	25.7	4,291	25.9
3-5 years.....	2,767	30.4	2,418	22.4	2,476	18.9	3,622	23.1	4,028	24.3
6-8 years.....	2,319	25.5	2,077	19.3	1,950	14.9	2,331	14.9	2,524	15.2
9-11 years.....	702	7.7	2,332	21.7	1,844	14.1	1,651	10.5	1,759	10.6
12 years and over.....	1,285	14.1	1,898	17.6	3,614	27.6	4,027	25.7	3,971	24.0

<sup>1</sup> For 1965 and earlier years, Willys jeeps included in "Cars"; thereafter, in "Trucks."

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# Motortrucks

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## No. 851. MOTORTRUCKS, BY SIZE-CLASS, RANGE OF OPERATION, AND MAJOR USE, 1963 AND 1967, AND BY STATES, 1967

[In thousands. Includes private and commercial single-unit trucks and combinations. Based on a probability sample of truck license holders; subject to sampling variability]

STATE	Total <sup>1</sup>	SIZE-CLASS <sup>2</sup>			RANGE OF OPERATION <sup>3</sup>			MAJOR USE				
		Light	Medium	Heavy	Local	Short	Long	Agriculture	Personal	Wholesale and retail trade	Construction	Utilities and services
1963	12,726	8,853	1,128	2,094	8,751	895	193	3,528	3,114	1,164	1,198	930
1967, total	15,360	11,318	2,098	1,944	3,722	623	228	3,710	5,169	1,887	1,444	1,231
N.E.												
Maine	560	384	94	82	184	32	4	59	150	105	89	67
N.H.	85	58	24	3	24	5	1	15	32	11	8	7
Vt.	49	39	5	5	12	3	(Z)	4	18	8	8	6
Mass.	31	20	5	6	10	2	(Z)	7	9	5	3	3
R.I.	195	125	30	40	71	11	2	12	34	46	38	27
Conn.	45	30	7	8	16	2	1	3	10	9	8	6
M.A.	165	112	23	20	51	9	(Z)	18	47	26	24	18
M.Y.	1,485	983	233	319	473	85	29	164	362	280	180	195
N.J.	569	346	112	112	207	32	9	63	95	126	72	91
Pa.	299	196	35	67	94	19	7	20	70	56	43	47
E.N.C.	617	391	86	140	172	34	13	81	197	98	65	57
Ohio	2,370	1,615	381	374	685	103	45	625	605	329	261	210
Ind.	530	350	84	95	156	29	13	142	103	78	69	54
Ill.	480	314	101	65	120	17	12	128	161	58	39	33
Mich.	568	388	94	86	187	23	6	144	135	88	64	53
Wis.	499	346	69	85	132	21	9	90	168	67	56	46
W.N.C.	293	217	33	43	90	13	5	121	38	38	33	24
W.Minn.	1,983	1,331	389	263	588	82	5	873	446	195	144	134
Iowa	358	282	42	35	111	14	5	140	77	38	36	27
Mo.	329	258	41	30	84	16	4	137	67	36	23	34
N.Dak.	436	229	119	87	121	17	9	158	119	44	35	27
S.Dak.	138	71	38	29	64	4	1	96	19	8	4	4
Kans.	115	89	16	10	25	4	1	60	29	8	6	5
Nebr.	226	138	51	37	75	16	5	93	38	38	14	18
S.A.	381	264	82	35	108	11	1	189	97	23	26	19
Del.	2,097	1,567	234	296	488	89	44	429	698	305	212	180
Md.	37	24	5	8	10	2	3	6	10	4	5	4
D.C.	188	119	27	41	62	9	2	29	51	33	29	22
Va.	17	10	4	3	8	(Z)	(Z)	(Z)	1	5	2	5
W.Va.	279	204	29	46	74	13	6	58	88	46	27	23
N.C.	142	107	18	17	35	8	2	20	66	14	8	12
S.C.	443	353	40	50	87	14	11	126	145	58	36	27
Ga.	198	150	20	28	42	8	3	52	65	30	14	13
Fla.	395	303	43	50	87	17	7	86	145	45	37	34
E.S.C.	398	297	48	53	83	18	10	52	127	70	54	40
Ky.	1,202	924	158	120	270	49	17	415	384	123	84	70
Tenn.	317	233	42	42	92	18	5	127	73	36	26	21
Ala.	323	250	48	25	66	9	5	126	88	30	28	19
Miss.	316	234	49	33	73	13	5	76	124	38	20	19
W.S.C.	246	207	19	20	39	9	2	86	99	19	10	11
Ark.	2,234	1,821	234	179	375	82	33	600	863	224	169	129
La.	288	231	35	23	58	9	4	81	121	22	16	17
Okla.	307	248	29	30	55	13	3	69	117	38	26	22
Tex.	412	315	62	34	84	14	7	159	141	25	21	17
Mt.	1,227	1,027	108	92	178	46	19	291	484	139	106	73
Mont.	1,136	908	121	107	219	35	11	267	544	82	80	63
Idaho	142	100	18	23	40	5	(Z)	62	47	6	9	7
Wyo.	132	98	16	17	32	5	1	45	55	10	6	4
Colo.	73	55	11	7	15	3	1	21	34	4	5	3
N. Mex.	278	224	34	20	55	7	3	71	126	23	22	15
Ariz.	138	123	7	9	14	5	1	21	78	10	10	8
Utah	192	162	15	14	31	4	2	20	107	15	14	15
Nev.	118	92	14	13	23	4	2	22	60	9	8	5
Pac.	63	54	6	4	8	2	1	4	38	5	6	6
Wash.	2,294	1,834	255	205	440	65	21	276	1,116	243	225	183
Oreg.	367	292	48	28	80	9	1	72	181	35	27	20
Calif.	209	153	30	25	47	10	5	44	95	16	13	10
Alaska	1,651	1,330	169	142	297	44	15	152	814	184	173	147
Hawaii	32	26	3	4	6	1	(Z)	1	19	2	5	2
	35	24	5	6	10	1	(Z)	7	7	6	7	4

Z. Less than 500. <sup>1</sup> Includes range of operation and major use categories not shown separately. 1963 includes miscellaneous trucks not classified.

<sup>2</sup> Standard classification for all States in terms of gross vehicle weight (empty weight of vehicle plus load it was designed to carry): Light—10,000 lb. or less; Medium—10,001 to 20,000 lb.; Heavy—20,001 lb. or more.

<sup>3</sup> Excludes pickup and panel trucks. Local—in or around city and suburbs, or within a short distance of farm, factory, mine, or place vehicle is stationed. Short range—beyond the local area, but usually not more than 200 miles one way to most distant stop from place vehicle is stationed. Long range—usually more than 200 miles one way to most distant stop from place vehicle is stationed.

Source: Dept. of Commerce, Bureau of the Census; 1963 Census of Transportation, Vol. II, *Truck Inventory and Use Survey* and 1967 *Truck Inventory and Use Survey*, TC67(A)—T61.

## No. 852. TRANSIT INDUSTRY—SUMMARY: 1940 TO 1968

[Money figures in millions of dollars, except as indicated. Prior to 1960, excludes Alaska and Hawaii. Comprises all privately and publicly owned organized local passenger transportation agencies except taxicabs, suburban railroads, and sightseeing and school buses. Covers (a) local motorbus lines, (b) electric street railways, (c) elevated and subway lines, (d) interurban electric railways and (e) trolley coach lines. Based on financial and statistical reports received by American Transit Association from transit companies representing more than 85 percent of the industry. See also *Historical Statistics, Colonial Times to 1957*, series Q 330-340]

ITEM	1940	1945	1950	1955	1960	1965	1966	1967	1968
<b>Operating companies</b>	(NA)	1,253	1,406	1,483	1,251	1,148	1,134	1,138	1,094
Motorbus companies <sup>1</sup>	(NA)	1,164	1,354	1,450	1,236	1,145	1,131	1,135	1,091
<b>Miles of route operated (Dec. 31):</b>									
Electric railway—single track	19,600	17,732	10,813	6,197	3,935	2,173	2,153	2,049	2,045
Surface	18,360	16,480	9,590	4,976	2,692	918	898	790	775
Subway and elevated	1,240	1,252	1,223	1,221	1,243	1,255	1,255	1,259	1,270
Trolley coach—negative overhead wire	1,925	2,368	3,482	3,428	2,196	766	676	616	616
Motorbus—route round trip	78,000	90,400	98,000	99,800	108,700	120,900	122,100	123,600	121,000
<b>Passenger vehicles owned (Dec. 31):</b>									
Electric railway cars	75,464	90,141	86,867	73,089	65,292	61,717	62,136	62,069	61,930
Surface	57,662	36,755	23,543	14,532	11,866	10,664	10,680	10,645	10,745
Subway	26,630	26,680	13,800	5,300	2,856	1,549	1,407	1,388	1,355
Elevated	11,032	10,075	9,743	9,232	9,010	9,115	9,273	9,257	9,390
Trolley coaches	2,802	3,716	6,504	6,157	3,826	1,453	1,326	1,244	1,185
Motorbuses	35,000	49,670	56,820	52,400	49,600	49,600	50,130	50,180	50,000
<b>Investment (Dec. 31):</b>									
Electric railway	4,096	4,262	3,918	3,821	3,937	4,225	4,350	4,492	4,533
Surface	3,588	3,620	3,060	2,902	3,003	3,243	3,321	3,429	3,475
Subway	1,574	1,570	913	616	367	165	149	150	146
Elevated	2,014	2,050	2,147	2,286	2,636	3,078	3,172	3,279	3,329
Trolley coach	58	76	144	180	117	49	43	40	38
Motorbus	450	566	714	759	817	933	986	1,023	1,020
<b>Operating finances:</b>									
Operating revenue	737	1,380	1,452	1,426	1,407	1,444	1,479	1,556	1,578
Electric railway	456	710	578	440	369	366	365	405	411
Surface	328	558	362	176	88	56	59	53	53
Subway and elevated	128	151	216	264	282	310	307	352	358
Trolley coach	25	68	122	131	82	42	39	36	36
Motorbuses	256	603	752	856	956	1,036	1,074	1,116	1,131
Operating expenses	598	1,067	1,297	1,277	1,290	1,374	1,424	1,531	1,610
Percent of revenue	81.1	77.3	89.3	89.6	91.7	95.2	96.3	98.4	102.0
Net revenue	139	313	155	149	117	70	55	25	25
Taxes (all)	63	165	89	93	87	81	92	92	98
Operating income	76	149	66	56	31	21	27	27	120
Percent of revenue	10.4	10.8	4.6	3.9	2.2	(*)	(*)	(*)	(*)
<b>Revenue vehicle-miles operated</b>									
Electric railway	2,596	3,254	3,008	2,448	2,143	2,008	1,984	1,997	1,989
Surface	1,316	1,398	907	561	466	437	422	434	444
Subway and elevated	845	940	463	178	75	42	43	38	38
Trolley coach	471	458	443	383	391	395	379	397	407
Motorbus	86	133	206	177	101	43	40	36	36
	1,195	1,722	1,895	1,710	1,576	1,528	1,522	1,526	1,508
<b>Passengers carried</b>									
Electric railway	13,098	23,254	17,246	11,529	9,395	8,253	8,083	8,172	8,019
Surface	8,325	12,124	6,168	3,077	2,313	2,134	2,035	2,201	2,181
Subway and elevated	5,943	9,426	3,904	1,207	463	276	282	263	253
Trolley coach	2,382	2,698	2,264	1,870	1,850	1,858	1,753	1,938	1,928
Motorbus	534	1,244	1,658	1,202	657	305	284	248	228
	4,239	9,886	7,420	7,250	6,425	5,814	5,764	5,723	5,610
<b>Revenue passengers carried</b>									
Electric railway	10,504	18,982	13,845	9,189	7,521	6,798	6,671	6,616	6,491
Surface	6,464	9,636	4,903	2,586	2,005	1,882	1,795	1,828	1,814
Subway and elevated	4,183	7,081	2,790	845	335	204	211	196	187
Trolley coach	2,282	2,555	2,113	1,741	1,670	1,678	1,584	1,632	1,627
Motorbus	419	1,001	1,261	869	447	186	174	155	152
	3,620	8,345	7,681	5,734	5,069	4,730	4,702	4,633	4,525
<b>Employees, number (avg.)</b>	203	242	240	198	156	145	144	146	144
Subway and elevated		34	39	41	35	36	36	38	38
Surface railway—trolley coach and motorbus	203		208	201	157	121	109	108	106
Payroll, employee	360	632	835	864	857	964	995	1,055	1,110
Average annual earnings per employee	1,773	2,612	3,479	4,364	5,481	6,645	6,895	7,222	7,727

NA Not available. <sup>1</sup> Comprises companies operating motorbuses exclusively and companies with combined services such as trolley coach and motorbus, etc.

<sup>2</sup> Deficit, not computed as percent of operating revenue.

Source: American Transit Association, Washington, D.C.; annual report, *Transit Fact Book*.

## No. 853. INTERCITY BUS LINES—SUMMARY OF OPERATIONS: 1960 TO 1969

ITEM	1960	1965	1966	1967	1968	1969 (est.)
Operating companies.....	1,150	1,100	1,050	1,050	1,050	1,050
Buses.....	20,974	20,600	21,500	21,900	22,100	22,500
Miles of highway served (Dec. 31) <sup>1</sup> .....	1,000	265	263	264	263	266
Employees (Dec. 31) <sup>2</sup> .....	1,000	45	45	46	47	48
Total bus miles.....	millions	1,092	1,157	1,200	1,205	1,190
Revenue passengers.....	millions	366	378	402	400	398
Revenue passenger-miles.....	millions	19,300	23,800	24,600	24,900	24,900
Operating revenue, all services.....	mil. dol.	556	701	740	768	798
Operating expenses.....	mil. dol.	495	600	638	682	709
Net operating revenue before income taxes.....	mil. dol.	61	101	102	86	89
Taxes assignable to operations <sup>3</sup> .....	mil. dol.	53	59	64	67	71

<sup>1</sup> Includes duplication between carriers. <sup>2</sup> Operating companies only. <sup>3</sup> Excludes income taxes.Source: National Association of Motor Bus Owners, Washington, D.C.; *Bus Facts*, and unpublished data.No. 854. CLASS I INTERCITY MOTOR CARRIERS OF PROPERTY AND PASSENGERS—  
SUMMARY STATISTICS: 1950 TO 1968<sup>1</sup> Carriers subject to ICC regulations. Prior to 1960, excludes Alaska and Hawaii. See text, p. 534, for explanation of class limits]

ITEM	1950	1955	1960	1965	1966	1967	1968
PROPERTY							
Carriers reporting.....	number	1,621	2,244	935	1,114	1,159	1,198
Operating revenue.....	mil. dol.	2,380	4,030	4,763	7,131	7,897	8,091
Common carrier.....	mil. dol.	2,181	3,622	4,384	6,637	7,347	7,524
Contract carrier and other.....	mil. dol.	199	408	379	493	549	568
Expenses.....	mil. dol.	2,215	3,870	4,645	6,780	7,505	7,796
As percent of operating revenue.....		93.1	96.0	97.5	94.8	95.0	95.2
Net operating revenue.....	mil. dol.	165	160	119	371	391	295
Net income before income taxes.....	mil. dol.	159	146	81	329	386	234
Net income after income taxes.....	mil. dol.	93	82	37	209	217	144
Owned revenue vehicles.....	1,000	191	289	279	355	384	394
Trucks.....	1,000	29	37	31	36	38	37
Truck tractors.....	1,000	61	92	88	105	114	116
Trailers (semi and full).....	1,000	101	159	161	214	233	241
Intercity vehicle-miles.....	mil.	5,532	7,559	7,203	9,154	9,814	9,815
Tons of intercity revenue freight carried.....	mil.	213	314	276	419	468	469
Miles per owned vehicle.....	53,833	53,008	59,393	65,217	66,437	64,199	68,303
Revenue per vehicle-mile (intercity).....	\$0.43	\$0.52	\$0.64	\$0.74	\$0.78	\$0.79	\$0.84
Expense per vehicle mile (intercity).....	\$0.41	\$0.51	\$0.65	\$0.72	\$0.76	\$0.79	\$0.84
Number of employees, average.....	1,000	224	332	327	375	421	425
Compensation of employees.....	mil. dol.	855	1,690	2,103	2,948	3,436	3,569
PASSENGERS							
Carriers reporting <sup>1</sup> .....	number	172	146	143	156	166	177
Operating revenue.....	mil. dol.	351	362	463	607	644	670
Passenger revenue <sup>2</sup> .....	mil. dol.	325	315	382	467	490	494
Special bus revenue and other.....	mil. dol.	27	47	81	141	154	176
Expenses.....	mil. dol.	315	331	405	514	550	591
As percent of operating revenue.....		89.7	91.4	87.5	84.7	85.4	88.3
Net operating revenue.....	mil. dol.	36	31	58	90	94	78
Ordinary income before income taxes.....	mil. dol.	35	29	55	90	92	83
Net income after income taxes.....	mil. dol.	19	16	28	52	54	61
Passenger vehicles <sup>2</sup> .....	number	14,566	13,127	12,680	13,287	14,298	15,406
Owned end of year <sup>2</sup> .....	number	13,200	11,547	10,946	11,295	11,749	12,307
Intercity.....	number	13,621	12,057	11,142	10,106	10,666	10,932
Vehicle-miles, passenger <sup>3</sup> .....	mil.	959	859	843	947	988	997
Number of revenue passengers carried.....	mil.	390	293	268	219	229	230
Miles per vehicle, average <sup>4</sup> .....	65,411	64,128	65,567	67,689	64,390	60,059	58,423
Average fare per passenger, per carrier (intercity) .....	\$1.01	\$1.37	\$2.12	\$2.73	\$2.71	\$2.79	\$2.91
Passenger revenue per vehicle-mile, regular-route.....	\$0.35	\$0.38	\$0.49	\$0.56	\$0.57	\$0.57	\$0.60
Expense per vehicle-mile.....	\$0.33	\$0.38	\$0.48	\$0.54	\$0.56	\$0.59	\$0.63
Number of employees, average.....	1,000	40	36	35	35	36	37
Compensation of employees.....	mil. dol.	139	159	196	250	269	287

<sup>1</sup> Excludes carriers subject to ICC jurisdiction engaged preponderantly in local or suburban service and carriers engaged in transportation of both property and passengers. <sup>2</sup> Regular route intercity and local.<sup>3</sup> Vehicles owned, leased, and operated under "purchased transportation" arrangements, operated in all revenue service. <sup>4</sup> Owned and leased vehicles, intercity service.Source: Interstate Commerce Commission; annual report, *Transport Statistics in the United States*, Part 7.

**No. 855. MOTOR-VEHICLE ACCIDENTS—PERSONS KILLED OR INJURED, BY CHARACTERISTICS OF ACCIDENTS: 1960 TO 1969**

[Number in thousands. Estimates based on summaries of motor vehicle accidents prepared by various States]

CHARACTERISTIC	PERSONS KILLED					PERSONS INJURED				
	1960	1965	1967	1968	1969	1960	1965	1967	1968	1969
	Number	38	49	53	55	56	3,078	4,100	4,200	4,400
Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
TYPE OF ACCIDENT										
Collision with—										
Automobile	39.5	41.2	40.6	41.6	39.8	74.9	72.5	75.3	72.3	73.2
Pedestrian	20.0	18.6	18.2	17.4	17.2	8.3	6.7	6.1	6.3	5.7
Fixed object	10.7	10.5	12.3	12.8	11.5	4.8	5.1	5.5	6.6	5.9
Other	4.8	4.5	5.0	4.3	4.4	2.1	2.4	2.4	2.3	2.3
Noncollision	25.0	25.2	23.9	23.9	27.1	9.9	13.3	10.7	12.5	12.9
WEATHER CONDITION										
Clear	87.4	84.8	83.5	83.7	84.6	83.9	78.6	79.1	79.0	80.3
Fog	1.2	2.0	1.7	2.2	1.8	0.7	1.5	1.1	1.2	1.1
Rain	9.0	11.0	12.1	11.6	11.5	10.6	15.4	14.9	14.6	14.3
Snow	2.4	2.2	2.7	2.5	2.1	4.8	4.5	4.9	5.2	4.3
ROAD CONDITION										
Dry	79.2	77.4	77.4	76.5	76.8	71.5	69.1	68.6	68.0	69.3
Wet	15.1	17.9	18.0	19.0	18.8	16.5	22.4	22.9	23.0	22.6
Snowy	2.8	1.4	2.1	2.5	2.0	5.8	2.6	3.9	5.2	8.1
Icy	2.9	3.3	2.5	2.0	2.0	6.2	5.9	4.6	3.8	
DAY OF ACCIDENT										
Sunday	17.7	18.7	17.5	17.9	17.5	15.2	13.6	13.9	14.4	14.1
Monday	11.5	10.9	11.6	11.4	11.5	13.5	13.2	12.4	12.6	12.9
Tuesday	11.6	10.0	10.6	10.5	10.6	12.2	11.9	11.9	11.7	12.4
Wednesday	10.5	11.2	10.4	10.8	11.2	12.1	12.9	12.9	12.1	12.5
Thursday	11.2	11.9	12.0	11.4	11.9	13.5	13.9	13.7	13.6	13.1
Friday	16.0	15.4	15.7	15.9	15.2	16.0	16.5	16.4	17.0	16.7
Saturday	21.5	21.9	22.2	22.1	22.1	17.5	18.0	18.8	18.6	18.3
HOUR OF ACCIDENT										
Midnight-6 a.m.	22.3	22.2	22.5	21.7	22.5	10.9	10.7	11.3	11.7	12.2
6 a.m.-noon	15.6	14.8	15.2	15.0	14.9	22.0	21.8	20.8	20.7	20.2
Noon-6 p.m.	27.8	28.7	28.2	29.4	27.8	40.5	39.7	39.7	39.6	39.5
6 p.m.-midnight	34.3	34.3	34.1	33.9	34.8	26.6	27.8	28.2	28.0	28.1
AGE OF VICTIMS										
Under 10 years	(NA)	7.6	7.3	6.9	(NA)	(NA)	8.9	8.3	8.6	(NA)
10-19 years	(NA)	15.9	17.4	17.7	(NA)	(NA)	21.4	24.6	23.2	(NA)
20-34 years	(NA)	28.4	28.7	29.8	(NA)	(NA)	31.6	32.5	33.1	(NA)
35-54 years	(NA)	24.3	24.0	22.8	(NA)	(NA)	25.7	23.0	23.5	(NA)
55 years and over	(NA)	23.8	22.6	22.8	(NA)	(NA)	12.4	11.6	11.6	(NA)

NA. Not available. <sup>1</sup> Railroad train, bicycle, other vehicle, and miscellaneous.

Source: The Travelers Insurance Companies, Hartford, Conn.; annual report, *The Travelers Book of Street and Highway Accident Data*.

**No. 856. MOTOR-VEHICLE ACCIDENTS—NUMBER AND DEATHS, BY TYPE OF ACCIDENT: 1950 TO 1969**

ITEM	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)
Motor-vehicle accidents	1,000	8,300	9,900	10,400	13,200	13,600	13,700	14,600
Accidents per 10,000 vehicles	1,688	1,577	1,397	1,439	1,418	1,385	1,415	1,449
Traffic deaths <sup>1</sup>	34,763	38,426	38,137	49,163	53,041	52,924	55,200	56,400
Noncollision accidents		10,600	12,100	11,900	14,900	16,300	16,700	17,800
Collision accidents:								2 15,000
With other motor vehicles	11,650	14,500	14,800	20,800	22,200	22,000	22,500	23,600
With pedestrians	9,000	8,200	7,850	8,900	9,400	9,400	9,800	9,900
With other vehicles or objects	3,490	3,605	3,610	4,060	5,140	4,820	5,100	5,800
Traffic death rates:								
Per 100,000 population	23.0	23.4	21.2	25.4	27.1	26.7	27.6	27.9
Per 10,000 motor vehicles	7.1	6.1	5.1	5.4	5.5	5.4	5.4	5.3
Per 100 million vehicle miles	7.6	6.4	5.3	5.5	5.7	5.5	5.4	5.3

<sup>1</sup> Totals do not equal sums of various types because the estimates are generally made only to nearest 10 deaths, and to nearest 50 deaths for certain types.

<sup>2</sup> Not comparable with earlier years due to changes in reporting procedure.

Source: National Safety Council, Chicago, Ill.; annual report, *Accident Facts*. (Copyright.)

## No. 857. DRIVER AND PEDESTRIAN ACTION IN ACCIDENTS: 1960 TO 1969

[Percent distribution. See headnote, table 855]

TYPE OF ACTION	PERSONS KILLED					PERSONS INJURED					
	1960	1965	1967	1968	1969	1960	1965	1967	1968	1969	
<b>DRIVER ACTION</b>											
All persons.....	1,000	30.4	41.6	52.2	45.8	46.2	2,600	3,682	4,200	3,880	4,140
Percent.....		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Exceeded speed limit.....		36.1	41.1	39.0	40.8	40.5	38.5	42.2	20.9	20.9	25.5
On wrong side of road.....		17.0	16.4	13.1	14.2	13.6	6.7	6.8	5.2	5.6	5.7
Had not right-of-way.....		12.8	13.0	14.3	13.1	12.6	22.5	18.9	20.1	19.2	19.2
Drove off roadway.....		16.6	10.5	13.2	12.7	15.4	8.3	8.9	8.9	8.8	13.9
Reckless driving.....		12.5	14.9	15.4	14.7	11.9	13.5	19.2	38.9	39.7	30.6
Other <sup>1</sup> .....		5.0	4.1	5.9	4.5	6.0	10.5	6.0	6.0	5.8	5.1
<b>PEDESTRIAN ACTION</b>											
Pedestrians.....	1,000	7.6	9.0	9.5	9.6	9.7	256	275	256	277	268
Percent.....		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Crossing at intersection:											
With signal.....		6.2	4.8	5.5	7.3		11.9	8.6	10.9	11.3	
Against signal.....		7.1	8.6	8.5	8.3	22.6	8.5	9.5	11.5	11.4	32.9
No signal.....		15.9	7.4	9.6	9.4		12.3	8.1	8.3	10.2	
Crossing between intersections.....		37.1	40.8	41.6	40.6	41.6	32.2	31.6	23.8	25.3	25.3
Children playing in street.....		5.3	3.8	2.9	3.1	2.8	6.6	6.3	6.0	5.0	6.5
At work in road.....		2.9	2.8	2.4	3.1	2.7	2.2	1.8	1.8	1.9	2.2
Coming from behind parked car.....		6.2	6.9	3.4	3.1	3.0	15.7	16.8	13.2	11.7	9.8
Walking on rural highway.....		10.0	15.6	14.1	14.1	14.6	2.4	7.6	7.7	6.9	8.3
Not on roadway.....		4.2	4.7	4.2	3.7	5.8	4.5	3.6	4.8	5.8	5.1
Other <sup>2</sup> .....		5.1	5.1	7.8	7.3	6.9	3.7	6.1	12.0	10.5	9.9

<sup>1</sup> Cutting in; improper passing; no or improper signalling; movement of driverless car; miscellaneous.<sup>2</sup> Standing on safety isle; getting on or off other vehicle; riding or hitching on vehicle; miscellaneous.Source: The Travelers Insurance Companies, Hartford, Conn.; annual report, *The Travelers Book of Street and Highway Accident Data*.

## No. 858. DEATHS FROM MOTOR-VEHICLE ACCIDENTS—PLACE OF DEATH, BY STATES: 1950 TO 1967

STATE	1950	1955	1960	1965	1967	STATE	1950	1955	1960	1965	1967
U.S. <sup>1</sup> .....	34,763	38,426	38,137	49,163	52,924	Mo.....	902	1,079	1,078	1,387	1,380
Ala.....	859	859	926	1,248	1,204	Mont.....	209	244	231	289	338
Alaska.....	22	31	43	57	53	Nebr.....	317	331	310	411	464
Ariz.....	333	384	507	555	612	N.H.....	122	186	182	215	190
Ark.....	365	447	449	635	669	N.J.....	103	110	103	148	162
Calif.....	3,082	3,524	3,837	4,804	5,050	N.J.....	715	815	764	1,104	1,196
Colo.....	415	455	443	557	611	N.Mex.....	340	383	427	517	453
Conn.....	287	353	303	415	466	N.Y.....	1,961	2,163	2,034	2,798	2,960
Del.....	84	112	91	126	142	N.C.....	1,153	1,222	1,281	1,723	1,815
D.C.....	102	99	82	99	163	N.Dak.....	105	153	166	176	213
Fla.....	882	1,048	1,303	1,702	1,839	Ohio.....	1,850	2,089	1,933	2,333	2,452
Ga.....	928	1,122	1,079	1,403	1,644	Oklahoma.....	504	569	686	730	866
Hawaii.....	74	64	111	110	150	Oreg.....	461	424	469	717	690
Idaho.....	243	184	231	262	274	Pa.....	1,655	1,872	1,685	2,167	2,474
Ill.....	1,953	1,877	1,564	2,197	2,469	R.I.....	87	94	60	102	112
Ind.....	1,136	1,189	1,164	1,550	1,614	S.C.....	627	698	690	847	865
Iowa.....	620	613	644	831	840	S.Dak.....	195	200	241	252	232
Kansas.....	546	613	535	684	686	Tenn.....	801	968	899	1,265	1,407
Ky.....	753	907	808	943	1,057	Tex.....	2,499	2,602	2,316	3,087	3,391
La.....	585	703	849	1,122	1,232	Utah.....	199	211	269	314	296
Maine.....	161	177	181	227	259	Vt.....	69	87	104	136	131
Md.....	480	500	527	710	806	Va.....	929	909	782	1,072	1,220
Mass.....	492	621	621	888	920	Wash.....	534	514	597	768	917
Mich.....	1,627	2,036	1,634	2,134	2,124	W.Va.....	400	398	371	507	575
Minn.....	558	613	750	897	1,017	Wis.....	857	954	926	1,055	1,144
Miss.....	525	562	669	723	926	Wyo.....	149	145	182	184	154

<sup>1</sup> Prior to 1960, excludes Alaska and Hawaii.Source: Dept. of Health, Education, and Welfare, Public Health Service; annual report, *Vital Statistics of the United States*.

## No. 859. RAILROADS—SUMMARY STATISTICS: 1940 TO 1968

[As of December 31. Prior to 1960, excludes Alaska and Hawaii. Covers class I and II railroads, excluding switching and terminal companies, except as noted. Includes intercorporate duplications. See also *Historical Statistics, Colonial Times to 1957*, series Q 44-124.]

ITEM	1940	1950	1960	1965	1966	1967	1968
Operating companies <sup>1</sup> —number	574	471	407	372	375	370	360
<b>Mileage:</b>							
Road owned, first track <sup>2</sup> —	233,670	223,779	217,552	211,384	210,573	209,292	208,111
Track operated:							
Reporting railroads <sup>3</sup> —	405,975	396,380	381,745	370,636	370,104	368,030	366,228
First track <sup>4</sup> —	245,740	236,857	230,169	226,615	225,528	224,039	222,924
Other main tracks—	41,373	40,456	34,800	31,113	30,906	30,387	30,002
Yardtrack and sidings—	118,862	119,067	116,776	113,508	113,670	113,604	113,312
Operated by receivers or trustees—	75,270	12,223	1,259	1,890	1,612	2,476	650
<b>Equipment:</b> <sup>4</sup>							
Locomotives in service—number	44,333	42,951	31,178	30,061	30,124	29,874	29,448
Average tractive effort <sup>5</sup> —pounds	50,905	57,075	61,314	63,096	70,900	65,267	61,799
Cars in service:							
Passenger-train—number	38,308	37,359	25,746	20,022	18,974	17,822	14,816
Freight train <sup>7</sup> —1,000	1,684	1,746	1,690	1,515	1,524	1,511	1,485
Average capacity <sup>8</sup> —tons	50.0	52.6	55.4	59.8	61.4	63.4	64.3
<b>Capital and property investment:</b> <sup>9</sup>							
Road and equipment, book value <sup>10</sup> —	25,646	30,174	35,513	35,489	36,618	37,251	36,720
Depreciation reserve <sup>11</sup> —mil. dol.	3,095	6,629	8,532	9,342	9,479	9,665	9,450
Capitalization outstanding <sup>12</sup> —mil. dol.	21,047	18,274	16,134	14,857	14,800	14,690	14,577
Capital surplus and retained income—							
mil. dol.	2,783	7,037	11,356	12,945	13,338	13,078	13,198
Stock paying dividends—mil. dol.	3,741	6,769	5,617	4,845	4,709	4,728	4,629
Dividends declared—mil. dol.	217	349	412	533	548	582	560
Interest accrued on funded debt—mil. dol.	547	367	387	403	423	455	473
<b>Income and expenses:</b>							
Operating revenues—mil. dol.	4,355	9,587	9,642	10,425	10,880	10,582	11,062
Operating expenses—mil. dol.	3,132	7,135	7,657	8,008	8,277	8,359	8,724
Tax accruals—mil. dol.	403	1,212	1,020	949	1,002	941	980
Net railway operating income—mil. dol.	691	1,055	595	980	1,065	690	694
Net income <sup>9</sup> —mil. dol.	243	855	473	866	957	13,368	13,628
<b>Passenger service:</b>							
Passenger revenue—mil. dol.	418	815	641	556	547	489	447
Passengers carried—millions	456	488	327	306	308	304	301
Passenger-miles—millions	23,816	31,790	21,284	17,454	17,162	15,264	13,184
Commutation <sup>8</sup> —millions	3,997	4,990	4,197	4,128	4,193	4,281	4,383
Coach <sup>8</sup> —millions	12,485	17,443	13,422	11,069	10,799	9,329	7,559
Parlor and sleeping car <sup>8</sup> —millions	7,288	9,338	3,643	2,191	2,104	1,592	1,178
Revenue per passenger-mile—cents	1.76	2.56	3.01	3.19	3.19	3.20	3.39
Average journey per passenger—miles	52.22	68.14	65.05	57.07	55.72	50.21	43.68
<b>Freight service:</b>							
Freight revenue—mil. dol.	3,584	7,934	8,152	9,037	9,487	9,329	9,942
Revenue-tonns originated—millions	1,069	1,421	1,301	1,479	1,544	1,498	1,515
Tons carried one mile—millions	375,369	591,550	575,360	705,705	746,699	727,075	750,468
Revenue ton-miles per mile of road—1,000	1,526	2,497	2,497	3,121	3,312	3,238	3,386
Revenue per ton-mile—cents	0.955	1.341	1.417	1.281	1.271	1.283	1.325
Haul per ton, U.S. as a system—miles	351.13	416.32	442.14	477.15	483.70	485.21	495.37
Number of employees, average—1,000	1,046	1,237	793	655	645	624	602
Compensation of employees—mil. dol.	1,991	4,645	4,957	4,887	4,975	5,026	5,197
<b>Accidents:</b> <sup>14</sup>							
Persons killed—number	4,740	3,398	2,248	2,399	2,684	2,483	2,359
Persons injured—number	29,606	33,265	19,577	25,789	25,852	24,523	24,608

<sup>1</sup> Includes unofficial companies and, through 1960, circular companies.

<sup>2</sup> Includes lessors, proprietary, unofficial and, through 1960, circular companies.; excludes Alaska.

<sup>3</sup> Includes mileage in Canada.

<sup>4</sup> Includes switching and terminal companies, except average tractive effort and average capacity.

<sup>5</sup> Through 1950, steam locomotives of class I railroads; beginning 1960, all locomotives of class I railroads.

<sup>6</sup> Represents horsepower. <sup>7</sup> Excludes cabooses. <sup>8</sup> Class I railroads only. <sup>9</sup> Includes lessors.

<sup>10</sup> Increase in investment over a period of years cannot be obtained accurately by subtraction of 1 year's investment from that of another owing to reorganization, sale or abandonment, reclassification, etc. Also includes proprietary companies. <sup>11</sup> Beginning 1960, includes amortization applicable to proprietary companies.

<sup>12</sup> Comprises common stock, preferred stock, and funded debt unmatured.

<sup>13</sup> After extraordinary and prior period items. <sup>14</sup> Includes highway grade crossing casualties.

Source: Interstate Commerce Commission; annual reports, *Transport Statistics in the United States*, Part 1, and *Accident Bulletin*. Beginning 1966, accident data from Dept. of Transportation, Federal Railroad Administration; annual report, *Accident Bulletin*.

## Railroads

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### No. 860. RAILROAD COMPANIES, BY CLASS: 1950 TO 1968

[Prior to 1960, excludes Alaska and Hawaii. See text, p. 534, for explanation of class limits]

CLASS OF COMPANY	1950	1955	1960	1964	1965	1966	1967	1968
Total	1,038	1,935	1,842	772	763	758	753	738
Class I line-haul operating	127	126	106	98	76	76	76	75
Lessors to class I	179	155	128	122	116	116	115	115
Class II line-haul operating	171	155	304	287	302	302	298	287
Lessors to class II	6	8	8	10	15	15	15	14
Switching and terminal	253	237	221	207	205	202	202	197
Proprietary	100	67	53	46	45	44	44	44
Unofficial	9	6	1	2	4	3	3	6

<sup>1</sup> Includes class III railroads for 1950 and 1955, and circular railroads through 1960, not shown separately.

<sup>2</sup> Includes operating, lessor, proprietary, and unofficial companies, and through 1960, circular.

<sup>3</sup> Excludes those in systems which file consolidated reports combining mileage, investment, and other items on a net system basis.

Source: Interstate Commerce Commission; annual reports, *Statistics of Railways in the United States*, and, beginning 1955, *Transport Statistics in the United States*, Part 1.

### No. 861. RAILROADS—EQUIPMENT IN SERVICE: 1950 TO 1968

[Prior to 1960, excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1957*, series Q 53-65]

ITEM	1950	1955	1960	1965	1966	1967	1968
<b>Locomotives</b>							
Steam	42,951	33,533	31,178	30,061	30,124	29,874	29,448
Electric	26,680	6,266	374	89	76	67	—
Diesel	827	639	498	365	347	324	307
Other	15,398	26,563	30,240	29,552	29,644	29,428	29,031
New units installed	48	65	66	55	57	55	110
<b>Freight cars</b>							
Box	1,745,778	1,723,747	1,690,396	1,515,168	1,523,741	1,510,963	1,484,571
Gondola and hopper	718,150	723,962	700,331	593,198	591,993	576,957	597,759
Other	874,801	845,809	831,473	753,892	756,201	755,444	745,183
Aggregate capacity	1,000 tons	90,465	91,229	91,948	88,323	91,441	93,669
Average capacity	tons	52.6	53.7	55.4	59.8	61.4	63.4
New units installed	40,032	29,070	54,032	62,859	56,480	60,289	41,228
<b>Passenger-train cars</b>							
Coaches	37,359	32,118	25,746	20,022	18,974	17,822	14,816
Average seating capacity	1	16,488	13,543	10,287	8,086	7,754	6,868
Nonpassenger (baggage, express, etc.)	75	75	76	76	76	81	85
Other	13,817	13,388	10,077	8,411	7,943	7,431	6,594
Air-conditioned cars	7,054	5,187	5,382	3,525	3,277	2,923	1,354
New units installed	16,747	14,784	11,787	8,079	7,589	7,159	(NA)
	1,078	412	251	666	113	146	65

<sup>—</sup> Represents zero. NA Not available.

<sup>1</sup> Class I railroads. <sup>2</sup> Excludes caboose cars. <sup>3</sup> Class I railroads and Pullman Company.

Source: Interstate Commerce Commission; annual report, *Transport Statistics in the United States*, Part 1.

### No. 862. RAILROADS, CLASS I LINE-HAUL—FUEL AND POWER CONSUMED AND RAILS AND TIES LAID: 1950 TO 1968

[See text, p. 534, for explanation of class limits. See *Historical Statistics, Colonial Times to 1957*, series Q 128-137, for related data]

ITEM	1950	1955	1960	1965	1966	1967	1968
<b>Fuel and power consumed:</b>							
Fuel	1,000 short tons	55,452	11,427	39	4	3	2
Fuel oil	mil. gal.	2,284	376	89	77	65	47
Diesel oil	mil. gal.	1,827	3,393	3,472	3,742	3,925	3,889
Electricity	mil. kw.-hr.	2,260	2,082	1,641	1,509	1,498	1,411
<b>Rails and ties laid:</b>							
Rails	1,000 short tons	2,628	2,099	1,066	1,167	1,293	1,171
Ties							
Crossties	1,000	33,091	27,173	16,417	16,982	17,699	17,458
Switch and bridge ties	1,000 board ft.	118,091	99,886	63,373	61,739	62,294	62,713

<sup>1</sup> New and used rails and ties used in replacement, additional tracks, new lines, and extensions.

Source: Interstate Commerce Commission; *Annual Report* and *Transport Statistics in the United States*, Part 1.

## Transportation—Land

## No. 863. RAILROADS—MILES OF ROAD OWNED, STATES: 1940 TO 1968

[As of December 31. Data are for actual length of line owned by line-haul companies in each State without duplication]

STATE	1940	1950	1960	1968	STATE	1940	1950	1960	1968
U.S.	234,398	224,371	217,552	208,111	S.A.—Con.				
N.E.	6,677	6,396	6,088	5,602	W. Va.	3,831	3,719	3,681	3,549
Maine	1,882	1,830	1,784	1,679	N.C.	4,668	4,435	4,310	4,184
N.H.	1,002	936	854	816	S.C.	3,466	3,223	3,284	3,131
Vt.	919	889	811	771	Ga.	6,334	6,043	5,854	5,440
Mass.	1,793	1,726	1,633	1,495	Fla.	5,218	4,793	4,655	4,348
R.I.	194	183	181	146	E.S.C.	16,179	15,574	15,233	14,761
Conn.	887	830	825	695	Ky.	3,691	3,641	3,526	3,511
M.A.	20,175	19,180	17,469	15,916	Tenn.	3,573	3,471	3,402	3,020
N.Y.	7,739	7,493	6,463	5,670	Ala.	4,996	4,723	4,646	4,577
N.J.	2,108	1,992	1,914	1,790	Miss.	3,919	3,739	3,650	3,658
Pa.	10,328	9,685	9,092	8,456	W.S.C.	31,497	29,771	28,341	26,810
E.N.C.	41,281	39,851	38,949	37,669	Ark.	4,482	4,104	3,872	3,605
Ohio	8,501	8,418	8,322	7,954	La.	4,357	4,079	3,927	3,803
Ind.	6,889	6,652	6,593	6,488	Okla.	6,302	5,977	5,777	5,451
Ill.	11,949	11,643	11,201	10,917	Tex.	16,356	15,611	14,755	13,951
Mich.	7,303	6,803	6,640	6,303	Mt.	23,518	22,101	21,355	20,856
Wis.	6,639	6,335	6,193	6,007	Mont.	5,149	5,059	4,962	4,926
W.N.C.	48,293	47,108	46,367	44,944	Idaho.	2,746	2,713	2,685	2,668
Minn.	8,421	8,333	8,174	7,973	Wyo.	2,008	1,925	1,882	1,848
Iowa	8,950	8,585	8,561	8,225	Colo.	4,552	4,273	3,786	3,737
Mo.	7,042	6,735	6,582	6,414	N. Mex.	2,812	2,496	2,473	2,219
N. Dak.	5,266	5,256	5,194	5,184	Ariz.	2,228	2,197	2,184	2,052
S. Dak.	4,006	3,958	3,920	3,805	Utah.	2,082	1,788	1,736	1,771
Nebr.	6,044	5,800	5,721	5,499	Nev.	1,941	1,650	1,647	1,635
Kans.	8,564	8,441	8,215	7,864	Pac.	17,303	16,466	16,388	15,516
S.A.	29,475	27,924	27,362	26,037	Wash.	5,243	5,124	4,987	4,932
Del.	295	295	293	292	Oreg.	3,385	3,217	3,174	3,081
Md.	1,367	1,309	1,141	1,122	Calif.	7,947	7,533	7,630	7,483
D.C.	35	34	31	31	Alaska.	536	567	572	20
Va.	4,261	4,073	4,113	3,951	Hawaii.	192	25	25	-

- Represents zero.

Source: Interstate Commerce Commission; annual reports, *Statistics of Railways in the United States*, and, beginning 1960, *Transport Statistics in the United States*, Part 1.

## No. 864. RAILROADS, CLASS I LINE-HAUL—REVENUES AND EXPENSES: 1950 TO 1969

[In millions of dollars, except percent. See text, p. 534, for explanation of class limits. See also *Historical Statistics, Colonial Times to 1957*, series Q 103-117]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)
Operating revenues.								
Freight.	9,473	10,106	9,514	10,208	10,655	10,366	10,860	11,451
Passenger.	7,817	8,538	8,025	8,836	9,281	9,130	9,755	10,346
Mail.	813	743	640	553	544	485	444	439
Express.	374	287	331	311	304	264	195	177
Other.	81	118	100	77	67	61	44	28
Operating expenses.	7,059	7,646	7,565	7,850	8,118	8,211	8,582	9,062
Maintenance.	2,995	3,175	2,952	3,011	3,148	3,159	3,320	3,503
Way and structures.	1,287	1,387	1,192	1,236	1,304	1,290	1,405	1,501
Equipment.	1,708	1,788	1,760	1,775	1,844	1,869	1,914	2,001
Traffic.	192	236	258	262	265	270	274	279
Transportation, rail line.	3,491	3,770	3,833	4,020	4,139	4,189	4,355	4,594
Miscellaneous operations.	110	108	82	67	66	60	52	50
General.	271	357	441	490	500	534	581	636
Net revenue from railway operations.	2,414	2,466	1,951	2,358	2,539	2,166	2,278	2,389
Tax accruals.	1,195	1,081	999	916	968	910	947	1,029
Operating income.	1,219	1,385	952	1,442	1,570	1,254	1,331	1,359
Net railway operating income.	1,040	1,128	584	962	1,046	676	688	659
Ratio of expenses to revenues (percent).	74.5	75.6	79.5	76.9	76.2	79.1	79.0	79.1
Expenditures for capital improvements.	1,065	908	919	1,631	1,963	1,522	1,187	1,509
Equipment.	779	568	634	1,304	1,564	1,148	819	1,089
Roadway and structures.	286	340	286	327	399	374	369	421

Source: Interstate Commerce Commission; *Annual Report*, and related monthly and quarterly reports.

**No. 865. RAILROADS, CLASS I LINE-HAUL—SELECTED FREIGHT STATISTICS: 1950 TO 1969**

[Excludes switching and terminal roads. Tons of 2,000 pounds. See text, p. 534, for explanation of class limits.  
See also *Historical Statistics, Colonial Times to 1957*, series Q 93]

ITEM	1950	1955	1960	1965	1967	1968	1969
Average miles of road operated.....	225,605	222,901	219,665	212,133	211,835	211,181	210,986
Operating revenue..... Per ton-mile..... Per ton per road.....	7,817 1.33 3.04	8,538 1.37 3.25	8,025 1.40 3.51	8,836 1.27 3.48	9,130 1.27 3.55	9,751 1.31 3.76	10,346 1.35 3.86
Revenue-tonnes: Originated..... Carried..... Carried 1 mile..... Average distance.....	1,354 millions millions	1,393 2,607 623,615	1,241 2,281 572,309	1,387 2,539 667,736	1,408 2,570 719,397	1,431 2,506 744,479	(NA) 2,671 767,867
Freight train miles..... Freight train car-miles: Loaded..... Empty.....	515 millions millions	476	405	421	420	420	433
Net ton-miles per train-mile <sup>1</sup> ..... Net ton-miles per loaded car-mile <sup>1</sup> ..... Train-miles per train-hour.....	19,644 10,140 31.7 16.8	20,099 11,054 32.0 18.6	17,287 10,872 33.9 19.5	17,885 11,420 39.7 20.1	17,449 12,183 41.0 20.3	17,825 12,253 1,768 20.4	17,965 12,366 1,804 20.1

NA Not available. <sup>1</sup> Revenue and nonrevenue freight.

Source: Interstate Commerce Commission; *Annual Report* and related monthly and quarterly reports.

**No. 866. RAILROADS, CLASS I—CARS OF REVENUE FREIGHT LOADED, 1940 TO 1969, AND BY COMMODITY GROUP, 1969**

[In thousands. Figures are 52-week totals. See text, p. 534, for explanation of class limits. "N.e.c." means not elsewhere classified]

YEAR	Total	Cars loaded with highway trailers	COMMODITY GROUP		Num-ber, 1969	COMMODITY GROUP		Num-ber, 1969
1940.....	36,358	(NA)	Coal.....	5,129	Farm products, except grain.....			901
1945.....	41,918	(NA)	Metallic ores.....	2,021	Lumber and wood products, n.e.c., except furniture.....			801
1950.....	38,903	(NA)	Crushed stone, gravel and sand.....	1,531	Waste and scrap materials.....			763
			Chemicals and allied products.....	1,498	Petroleum products.....			597
1955.....	37,636	168	Metals and prod., except coke.....	1,491	Nonmetallic minerals, n.e.c.....			544
1960.....	30,441	554	Grain.....	1,284	Coke.....			434
1965.....	29,248	1,034	Pulp, paper and allied products.....	1,279	Forwarder and shipper associa-tion traffic.....			380
			Food and kindred products, n.e.c.....	1,269	All other carloads.....			3,686
1966.....	29,623	1,163	Primary forest products.....	1,269	Less than carload.....			96
1967.....	28,084	1,207	Motor vehicles and equipment.....	1,175				
1968.....	28,253	1,337	Stone, clay and glass products.....	1,100				
1969.....	28,292	1,344	Grain mill products.....	1,045				

NA Not available.

Source: Association of American Railroads, Car Service Division, Washington, D.C.; annual reports, *Cars of Revenue Freight Loaded*.

**No. 867. RAILROADS, CLASS I LINE-HAUL—SELECTED PASSENGER STATISTICS: 1950 TO 1969**

[See text, p. 534, for explanation of class limits. See also *Historical Statistics, Colonial Times to 1957*, series Q 87-89]

ITEM	1950	1955	1960	1965	1967	1968	1969 (prel.)
Average miles of road operated.....	146,468	119,745	98,816	76,993	67,827	59,250	56,484
Passenger revenue..... Revenue per passenger-mile:	813	743	640	553	485	444	439
Including commutation passengers..... Excluding commutation passengers.....	cents cents	2.56 2.74	2.60 2.70	3.01 3.03	3.18 3.14	3.19 3.13	3.38 3.33
Revenue passengers carried.....	486	432	326	299	297	296	296
Revenue passenger-miles.....	31,760	28,523	21,257	17,389	15,201	13,120	12,168
Average distance.....	miles	65.3	66.0	65.2	58.2	51.2	44.4
Revenue passenger-miles per train-mile.....	88.5	95.2	100.9	100.9	101.5	107.0	113.6
Revenue passenger-miles per car-mile.....	17.0	17.8	19.3	19.5	20.7	22.4	24.7
Passenger-train miles.....	358	299	209	172	150	123	107
Passenger-carrying car-miles.....	1,870	1,602	1,101	895	730	581	489
Train-miles per train-hour.....	37.4	39.8	40.7	41.3	41.7	41.0	41.0

Source: Interstate Commerce Commission; *Annual Report*, and *Transport Statistics in the United States*, Part 1, related monthly and quarterly reports, and unpublished data.

## No. 868. RAILROADS—EMPLOYEES, HOURS, AND COMPENSATION: 1950 TO 1969

[Excludes switching and terminal roads. See also *Historical Statistics, Colonial Times to 1957*, series Q141-142]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969
Classes I and II line-haul railroads: <sup>1</sup>								
Number of employees, average.....	1,000	2,1237	2,1,071	783	655	645	624	602
Compensation of employees, total.....	mil. dol.	2,4,645	2,5,045	4,957	4,887	4,975	5,026	5,197
Class I line-haul railroads: <sup>1</sup>								
Number of employees, average.....	1,000	1,220	1,058	780	640	631	610	591
Man-hours paid for.....	mil.	2,877	2,503	1,841	1,565	1,541	1,466	1,442
Average hours per employee.....		2,357	2,366	2,358	2,445	2,443	2,403	2,442
Compensation of employees:								
Total.....	mil. dol.	4,594	4,992	4,894	4,793	4,879	4,934	5,111
Average per hour.....	dol.	1.60	2.00	2.66	3.06	3.17	3.36	3.54
Average per year.....	dol.	3,765	4,719	6,270	7,490	7,734	8,085	8,654
	NA	Not available.	<sup>1</sup> See text, p. 534, for explanation of class limits.		<sup>2</sup> Excludes Alaska and Hawaii.			

Source: Interstate Commerce Commission; annual report, *Transport Statistics in the United States*, Part 1, and related monthly and quarterly reports.

## No. 869. RAILROAD ACCIDENTS—PERSONS KILLED AND INJURED, BY TYPE OF ACCIDENT: 1950 TO 1968

[Prior to 1960, excludes Alaska and Hawaii. Covers all reportable accidents, i.e., those resulting in personal casualty or in damage to railroad property exceeding amounts specified by Federal Railroad Administration. See also *Historical Statistics, Colonial Times to 1957*, series Q 143 and 144]

YEAR	TOTAL		TRAIN		TRAIN SERVICE				NONTRAIN	
	Killed	Injured	Killed	Injured	Total		Grade crossing (train and train service)		Killed	Injured
					Killed	Injured	Killed	Injured		
1950.....	3,398	33,255	336	2,315	2,921	19,454	1,576	4,368	141	11,486
1955.....	2,667	27,832	259	1,183	2,316	16,856	1,446	4,014	92	9,793
1960.....	2,248	19,577	155	847	2,042	12,877	1,364	3,424	50	5,853
1965.....	2,399	25,789	191	864	2,136	16,577	1,534	3,801	72	8,348
1967.....	2,453	24,523	170	754	2,238	15,888	1,682	3,812	75	7,881
1968.....	2,359	24,608	142	1,293	2,141	15,500	1,546	3,774	76	7,815

Source: 1950-1965, Interstate Commerce Commission; annual report, *Accident Bulletin*. Beginning 1967, Dept. of Transportation, Federal Railroad Administration; annual report, *Accident Bulletin*.

## No. 870. HIGHWAY GRADE CROSSINGS—NUMBER AND ACCIDENTS: 1950 TO 1968

[Prior to 1960, excludes Alaska and Hawaii. Covers all railroads, except as noted. See also headnote, table 869. See also *Historical Statistics, Colonial Times to 1957*, series Q 125-127]

YEAR	HIGHWAY GRADE CROSSINGS <sup>1</sup>			ACCIDENTS				
	Total	Spe- cially pro- tected <sup>2</sup>	Elimi- nated by sepa- ration of grades	Number <sup>3</sup>	All persons <sup>3</sup>		Involving motor vehicles	
					Number killed	Number injured		
1950.....	227,364	35,988	61	4,000	1,576	4,368	1,393	4,206
1955.....	226,318	39,080	84	3,846	1,446	4,014	1,313	3,886
1960.....	224,513	42,267	102	3,195	1,364	3,424	1,254	3,277
1965.....	215,961	44,833	59	3,820	1,534	3,801	1,434	3,663
1967.....	213,723	45,213	132	3,932	1,632	3,812	1,503	3,703
1968.....	211,993	45,502	207	3,816	1,546	3,774	1,424	3,645

<sup>1</sup> Class I railroads only. <sup>2</sup> Includes crossings with operated gates or watchmen, or both, during at least part of day; and those with audible or visible signals, or both. Excludes those with fixed signs only.

<sup>3</sup> Excludes nontrain accidents.

Source: Interstate Commerce Commission; annual reports, *Accident Bulletin*, *Statistics of Railways in the United States*, and, beginning 1955, *Transport Statistics in the United States*, Part 1. Beginning 1966, accident data from Dept. of Transportation, Federal Railroad Administration; annual report, *Accident Bulletin*.

# Petroleum Pipelines

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## No. 871. PETROLEUM PIPELINE COMPANIES—SUMMARY: 1950 TO 1968

[Prior to 1960, excludes Alaska and Hawaii. Refers to pipeline companies operating in interstate commerce and subject to jurisdiction of Interstate Commerce Commission. See *Historical Statistics, Colonial Times to 1957*, series Q 342-344 for miles of line operated and oil originated]

ITEM	1950	1955	1960	1965	1966	1967	1968
Companies reporting number	76	84	87	89	87	90	97
Miles of line operated	1,000	129	140	152	161	163	165
Gathering lines	1,000	48	51	49	47	47	48
Trunk lines	1,000	81	90	103	115	116	118
Investment in carrier property	mil. dol.	1,656	2,586	3,300	4,178	4,433	4,745
Investments and special funds	mil. dol.	101	81	114	59	76	110
Cash	mil. dol.	65	94	94	110	97	102
Current assets	mil. dol.	192	353	393	555	572	519
Current liabilities	mil. dol.	126	185	187	301	333	354
Retained income	mil. dol.	219	432	701	835	858	873
Capitalization	mil. dol.	660	1,282	1,439	1,635	1,790	1,943
Capital stock	mil. dol.	236	331	384	382	388	405
Long-term debt due after 1 year	mil. dol.	424	951	1,056	1,253	1,402	1,538
Dividends declared	mil. dol.	51	101	143	197	200	229
Operating revenues	mil. dol.	442	678	770	904	941	995
Operating expenses	mil. dol.	255	347	418	515	533	564
Net carrier operating income	mil. dol.	(2)	(2)	(2)	389	408	430
Other income and deductions	mil. dol.	(2)	(2)	(2)	-39	-44	-53
Ordinary income before income taxes	mil. dol.	(2)	(2)	(2)	349	364	377
Federal income taxes on ordinary income	mil. dol.	(2)	(2)	(2)	131	128	124
Net income	mil. dol.	81	153	169	218	236	261
Oil transported:							
Total received into system	mil. bbl.	2,766	4,058	4,783	5,868	6,252	6,814
From connecting carriers	mil. bbl.	944	1,434	1,636	1,620	1,651	1,761
Crude oil	mil. bbl.	879	1,299	1,402	1,385	1,388	1,456
Products	mil. bbl.	65	134	234	235	263	305
Originated	mil. bbl.	1,822	2,624	3,147	4,247	4,600	5,052
Crude oil	mil. bbl.	1,525	2,038	2,239	2,618	2,826	3,017
Products	mil. bbl.	297	586	909	1,629	1,774	2,035
Total delivered out of system	mil. bbl.	2,740	4,039	4,783	5,864	6,238	6,800
To connecting carriers	mil. bbl.	937	1,444	1,639	1,757	1,770	1,890
Crude oil	mil. bbl.	874	1,329	1,400	1,361	1,370	1,423
Products	mil. bbl.	63	115	240	396	401	467
Terminated	mil. bbl.	1,803	2,595	3,144	4,107	4,468	4,910
Crude oil	mil. bbl.	1,510	1,992	2,253	2,641	2,833	3,047
Products	mil. bbl.	293	603	891	1,466	1,635	1,863
Trunk line movement:							
Crude oil	mil. bbl.	1,977	2,781	3,091	3,505	3,661	3,886
Products	mil. bbl.	360	717	1,124	1,872	2,050	2,339
Barrel-miles, trunk lines:	bil.	577	839	976	1,121	1,181	1,207
Crude oil	bil.	107	205	304	627	720	925
Number of employees, average	1,000	26	25	21	17	16	16
Compensation of employees	mil. dol.	115	142	151	141	141	153

<sup>1</sup> Includes pipeline taxes; excludes Federal income taxes.

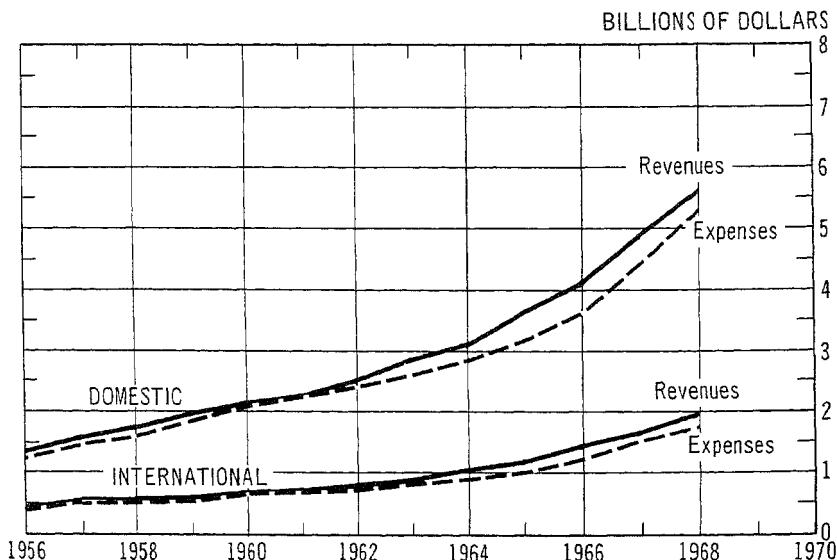
<sup>2</sup> Years prior to 1965 based on a different system of accounts; therefore, comparable data not available.

<sup>3</sup> After extraordinary and prior period items.

Source: Interstate Commerce Commission; annual reports, *Statistics of Oil Pipeline Companies*, and, beginning 1955, *Transport Statistics in the United States*, Part 6.

FIG. XXXVI. OPERATING REVENUES AND EXPENSES OF SCHEDULED AIR CARRIERS:  
1956 TO 1968

[See table 872]

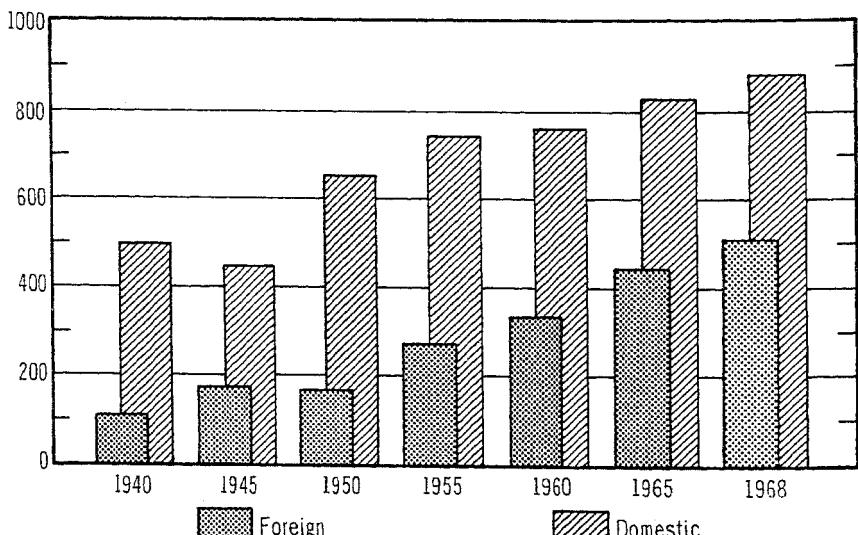


Source: Chart prepared by Dept. of Commerce, Bureau of the Census. Data from Federal Aviation Administration.

FIG. XXXVII. WATERBORNE COMMERCE OF THE UNITED STATES: 1940 TO 1968

[See table 885]

MILLIONS OF TONS



Source: Chart prepared by Dept. of Commerce, Bureau of the Census. Data from Dept. of the Army, Corps of Engineers.

## Section 22

### Transportation—Air and Water

This section presents statistics on civil air transportation, both passenger and cargo, and on water transportation, including inland waterways, oceanborne commerce, the merchant marine, cargo and vessel tonnages, and shipbuilding. The principal sources of these data are the annual *FAA Statistical Handbook of Aviation*, issued by the Federal Aviation Administration; the annual *Waterborne Commerce of the United States* and the *Annual Report of the Chief of Engineers*, Part 2, issued by the Corps of Engineers of the Department of the Army; the monthly and annual *U.S. Waterborne Foreign Trade*, and *U.S. Airborne Foreign Trade*, issued by the Bureau of the Census; and the annual *Merchant Marine Statistics*, issued by the Bureau of Customs.

Data on air transportation are also presented in *Air Transport Facts and Figures*, published annually by the Air Transport Association of America, Washington, D.C. Additional sources of data on water transportation include *A Statistical Analysis of the World's Merchant Fleets*, issued periodically by the Maritime Administration of the Department of Commerce; *The Bulletin*, issued monthly by the American Bureau of Shipping, New York; and the *Annual Summary of Merchant Ships Launched in the World* and the *Register Book* published by Lloyd's Register of Shipping, London, England. The 1821 through 1946, the 1946-1963, and the 1964 issues of *Foreign Commerce and Navigation of the United States*, published by the Bureau of the Census, are basic sources of historical data. Data relating to merchandise exports and imports are in section 30 of this *Abstract*, Foreign Commerce and Aid.

**Civil aviation.**—Federal promotion and regulation of civil aviation are carried out by the Federal Aviation Administration and the Civil Aeronautics Board. The Board issues certificates permitting persons to engage in air transportation as a business, fixes air mail rates which they may charge, and may establish maximum and minimum rates for transportation of passengers and goods. It also has the duty of investigating accidents in air transportation.

The principal activities of the Federal Aviation Administration are: Controlling the use of navigable airspace; prescribing regulations dealing with the competency of airmen, airworthiness of aircraft, and air traffic control; operation of air route traffic control centers, airport traffic control towers, and flight service stations; the design, construction, maintenance, and inspection of navigation, traffic control, and communications equipment for the airways; and promotion of air safety.

These agencies publish annual operational data on the use of airway facilities; data related to the location of airmen, aircraft, and airports; the activity volume in the field of non-air carrier (general aviation) flying; and aircraft production and registration.

**Air carriers and service.**—The term *certificated route air carrier* refers to air carriers holding certificates of public convenience and necessity, issued by the Civil Aeronautics Board, authorizing the performance of scheduled air transportation over specified routes and a limited amount of nonscheduled operations. This general carrier grouping includes the all-purpose carrier (i.e., the so-called passenger/cargo carriers) and the all-cargo carriers, and comprises all of the airlines certificated by the board, except the supplemental air carriers. Certificated route air carriers are often referred to as "scheduled airlines," although they also perform nonscheduled service. *Nonscheduled service* comprises revenue flights that are not operated in regular scheduled service, such as charter flights, and all nonrevenue flights incident to such flights. *Scheduled service* is transport service operated over an air carrier's certificated routes, based on published flight schedules, including extra sections and related nonrevenue flights.

**Vessel shipments, entrances, and clearances.**—Shipments by dry cargo vessels comprise shipments on all types of watercraft except tanker vessels; shipments by tanker vessels comprise all types of cargo, liquid and dry, carried by tanker vessels.

A vessel is reported as entered only at the first port which it enters in the United States whether or not cargo is unloaded at that port. A vessel is reported as cleared only at the last port at which clearance is made to a foreign port, whether or not it takes on cargo. Army and Navy vessels entering or clearing without commercial cargo and vessels touching at a United States port in distress, or for other temporary causes without discharging cargo, are not included in the figures.

**Units of measurement.**—Cargo tonnage and shipping weight both represent the gross weight of the cargo including the weight of containers, wrappings, crates, etc. However, shipping weight excludes lift and cargo vans and similar substantial outer containers. Other tonnage figures generally refer to stowing capacity of vessels, 100 cubic feet being called 1 ton. Gross tonnage comprises the space within the frames and the ceiling of the hull, together with those closed-in spaces above deck available for cargo, stores, passengers, or crew, with certain minor exceptions. Net or registered tonnage is the gross tonnage less the spaces occupied by the propelling machinery, fuel, crew quarters, master's cabin, and navigation spaces. It represents substantially space available for cargo and passengers. The net tonnage capacity of a ship may bear little relation to weight of cargo. Dead-weight tonnage is the weight in long tons required to depress a vessel from light water line (that is, with only the machinery and equipment on board) to load line. It is therefore the weight of the cargo, fuel, etc., which a vessel is designed to carry with safety.

**Historical statistics.**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1957*. See preface.

**No. 872. SCHEDULED AIR CARRIERS—NUMBER, OPERATING REVENUES, AND EXPENSES: 1955 TO 1968**

[In millions of dollars, except number of carriers. 1955 not exactly comparable with later years. See also headnote, table 876]

ITEM	1955	1960	1964	1965	1966	1967	1968
<b>DOMESTIC</b>							
Number of air carriers <sup>1</sup> .....	42	42	40	40	40	39	38
Revenues.....	1,215	2,129	3,095	3,609	4,070	4,887	5,607
Passenger.....	1,065	1,860	2,701	3,142	3,534	4,260	4,912
Mail (including subsidy).....	61	113	149	158	162	170	185
Express and freight.....	62	103	181	220	251	287	10
Other.....	27	53	63	89	123	170	500
Expenses.....	1,091	2,091	2,778	3,165	3,589	4,476	5,298
Aircraft.....	559	1,043	1,615	1,811	2,008	2,502	2,949
Flying operations.....	328	601	756	855	974	1,229	1,506
Direct maintenance flight equipment.....	138	258	580	640	680	832	911
Depreciation and amortization flight equipment.....	93	184	279	316	353	441	532
Ground and indirect.....	532	1,048	1,163	1,354	1,582	1,974	2,349
Net operating income.....	124	38	317	443	481	411	309
<b>INTERNATIONAL</b>							
Number of air carriers <sup>1</sup> .....	9	13	10	10	10	10	9
Revenues.....	398	685	1,028	1,199	1,474	1,770	1,958
Passenger.....	300	528	782	887	995	1,166	1,309
Mail (including subsidy).....	30	48	71	82	132	145	136
Express and freight.....	33	59	100	131	150	164	186
Other.....	35	51	75	99	198	295	327
Expenses.....	380	639	896	1,001	1,221	1,497	1,747
Aircraft.....	181	304	472	509	634	792	920
Flying operations.....	115	180	238	263	329	424	495
Direct maintenance flight equipment.....	37	58	145	146	181	212	244
Depreciation and amortization of flight equipment.....	29	66	88	100	124	156	181
Ground and indirect.....	200	336	424	493	586	705	827
Net operating income.....	18	45	132	198	253	273	211

<sup>1</sup> Includes all cargo carriers. Each airline is counted only in the group in which the greater portion of its operations prevailed.

Source: Dept. of Transportation, Federal Aviation Administration; *FAA Statistical Handbook of Aviation*. Data from Civil Aeronautics Board.

# Civil Flying

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## No. 873. SUMMARY OF CIVIL FLYING: 1950 TO 1969

[As of Dec. 31 or for years ending Dec. 31. General aviation flying excludes civil flying performed by public carriers—scheduled, supplemental, contract, or intrastate. See also *Historical Statistics, Colonial Times to 1957*, series Q 376-383 and Q 394-397]

ITEM	1950	1960	1965	1966	1967	1968	1969
Airports in operation <sup>1</sup> .....	6,403	6,881	9,566	9,673	10,126	10,470	11,050
Public <sup>2</sup> .....	2,272	2,750	3,570	3,630	3,830	3,986	4,155
Private <sup>2</sup> .....	4,131	4,101	5,996	6,043	6,296	6,484	6,895
Lighted airports.....	1,670	2,133	2,878	2,988	3,149	3,312	3,430
Airports with paved runways.....	1,422	1,893	2,747	2,859	3,109	3,353	3,650
Miles of Federal airways <sup>3</sup> .....	70,253	178,924	141,856	131,231	133,565	137,434	138,450
Federal aid to airports: <sup>3</sup>							
Cumulative since 1946.....	mil. dol.	(NA)	1,184	1,887	2,052	2,193	2,447
Federal funds.....	mil. dol.	(NA)	573	935	1,018	1,090	1,165
Sponsor funds.....	mil. dol.	(NA)	611	952	1,034	1,103	1,197
Annual Federal funds.....	mil. dol.	(NA)	362	83	72	75	33
Annual sponsor funds.....	mil. dol.	(NA)	341	82	69	94	52
Total civil aircraft <sup>4</sup> .....	92,809	111,580	142,078	155,182	166,598	179,285	(NA)
Eligible aircraft.....	60,921	78,760	97,741	107,085	116,781	127,164	(NA)
Air carriers, total <sup>5</sup> .....		2,211	2,299	2,379	2,595	2,927	(NA)
General aviation aircraft.....		(NA)	76,549	95,442	104,706	114,186	124,237
Fixed-wing aircraft:							
Multi-engine.....		(NA)	7,243	11,977	13,548	14,651	16,760
Single-engine, 4-place and over.....		(NA)	34,829	49,789	52,972	56,865	60,977
Single-engine, 3-place and less.....		(NA)	33,472	31,364	35,687	39,675	42,830
Rotorcraft <sup>6</sup> .....		(NA)	634	1,503	1,622	1,899	2,350
Other <sup>7</sup> .....		(NA)	371	809	877	1,096	1,320
Active airman certificates held <sup>8</sup> .....							
Pilot <sup>9</sup> .....		(NA)	549,119	719,137	804,786	894,153	972,207
Airline transport.....		(NA)	348,062	470,770	548,757	617,931	691,695
Commercial.....		(NA)	18,279	22,440	23,917	25,817	28,607
Private.....		(NA)	89,904	116,665	131,539	150,135	184,458
Student.....		(NA)	138,869	196,393	222,427	253,312	281,728
Hours flown (general aviation).....	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Business <sup>11</sup> .....	1,000	2,750	5,699	5,857	7,057	6,578	6,976
Commercial <sup>12</sup> .....	1,000	1,500	2,365	3,348	3,555	3,918	4,810
Instructional.....	1,000	3,000	1,828	3,348	5,674	6,262	6,494
Personal.....	1,000	2,300	3,172	4,016	4,540	5,173	5,532
Other.....	1,000	100	57	166	197	222	241
Miles flown (general aviation)....millions.....	10 9,650	13,121	16,733	21,028	22,153	24,053	(NA)
Business <sup>11</sup> ....millions.....	340	5,699	8,204	10,204	11,586	14,431	14,406
Commercial <sup>12</sup> ....millions.....	181	299	461	516	569	666	(NA)
Instructional.....	287	194	359	646	713	814	(NA)
Personal.....	244	387	512	606	691	777	(NA)
Other.....	11	8	26	32	36	37	(NA)
Fuel consumed (general aviation):							
Gasoline.....	1,000 gal.	10 131,200	242,417	291,841	374,610	396,234	494,987
Jet fuel.....	1,000 gal.	—	—	81,277	106,015	138,100	115,460
Oil.....	1,000 gal.	10 2,916	3,910	4,554	5,739	6,220	(NA)
Domestic air cargo, revenue ton-miles flown <sup>13</sup> .....	millions.....	239	724	1,681	1,944	2,168	2,326
Scheduled carriers.....	millions.....	211	476	1,112	1,301	1,498	1,775
Nonscheduled carriers <sup>14</sup> .....	millions.....	16	135	330	389	406	246
Supplemental carriers <sup>15</sup> .....	millions.....	13	112	220	254	264	305
Aircraft accidents <sup>16</sup> .....		4,595	4,883	5,279	5,787	6,185	5,141
Air carrier <sup>17</sup> .....		90	90	83	75	70	64
Fatal.....		11	17	9	8	12	10
Fatalities.....		205	499	261	272	286	351
General aviation.....		4,505	4,793	5,196	5,712	6,115	5,069
Fatal.....		499	429	538	573	603	692
Fatalities.....		871	787	1,029	1,151	1,228	1,374

<sup>1</sup> Represents zero. <sup>NA</sup> Not available.

<sup>2</sup> Existing airports and airfields recorded with FAA. Includes military airports with joint civil and military use. Beginning 1960, includes Puerto Rico, American Samoa, Canton, Guam, Virgin Islands, and Wake Island.

<sup>3</sup> Airport type definitions: Public—public use and public services, public control; Private—(a) public use and public services, private control, and (b) no public services, private control, military control, or Federal Government control. <sup>4</sup> Includes outlying areas of the United States.

<sup>5</sup> Includes gliders; beginning 1960, dirigibles and balloons.

<sup>6</sup> Registered, not necessarily in operation. Includes helicopters.

<sup>7</sup> Includes autogiros; excludes air carrier helicopters. <sup>8</sup> Includes gliders, blimps, and balloons.

<sup>9</sup> Includes nonpilot technicians and flight instructors, not shown separately.

<sup>10</sup> Includes helicopter, glider, and other pilots, not shown separately. <sup>11</sup> Excludes Alaska and Hawaii.

<sup>12</sup> Corporation and individual business transportation, not for hire.

<sup>13</sup> Passenger and cargo transportation for hire, aerial application (crop dusting, spraying, seeding, etc.), patrol, survey, and other miscellaneous work use. <sup>14</sup> Comprises express and freight ton-miles.

<sup>15</sup> Includes some military ton-miles and may include a small amount of international traffic.

<sup>16</sup> Civil and military. <sup>17</sup> Beginning 1968, data not strictly comparable due to change of definition.

<sup>18</sup> Excludes commercial operators.

Source: Dept. of Transportation, Federal Aviation Administration; *FAA Statistical Handbook of Aviation*. Includes data from Civil Aeronautics Board and National Transportation Safety Board.

## Transportation—Air and Water

## No. 874. CIVIL AIRCRAFT, 1968, AND AIRPORTS, AND FEDERAL-AID AIRPORT PROGRAM, 1969, BY STATES AND OTHER AREAS

[As of December 31, except as noted]

STATE OR OTHER AREA	Active aircraft, civil, 1968 <sup>1</sup>	1969				STATE OR OTHER AREA	1969						
		Airports <sup>2</sup>		Federal-aid air- port program <sup>3</sup> (mil. dol.)			Active aircraft, civil, 1968 <sup>1</sup>		Airports <sup>2</sup>		Federal-aid air- port program <sup>3</sup> (mil. dol.)		
		Pub- lic	Pri- vate	Total	Federal funds		Pub- lic	Pri- vate	Total	Federal funds			
Total	133,814	4,155	6,895	2,447.1	1,198.4	Mo.	3,395	95	192	66.8	33.4		
Ala.	2,262	83	48	39.8	20.0	Mont.	1,461	116	64	21.2	11.1		
Alaska	2,272	495	196	69.1	44.6	Nebr.	1,763	80	26.7	12.8			
Ariz.	2,197	100	107	32.0	17.4	N.H.	972	52	55	20.0	12.2		
Ark.	1,588	67	68	22.5	11.2	N.J.	445	16	35	6.2	3.1		
Calif.	17,643	253	467	218.1	106.7	N. Mex.	2,798	21	146	47.3	20.2		
Colo.	2,236	70	115	37.9	19.8	N.Y.	1,181	64	60	15.3	8.5		
Conn.	1,140	13	61	19.7	9.7	N.C.	6,130	62	347	183.5	82.5		
Del.	581	5	19	2.0	1.0	N.Dak.	2,445	54	155	40.4	20.2		
D.C.	813	5	—	—	—	Ohio	1,005	77	98	11.8	5.8		
Fla.	5,454	113	183	105.6	50.1	Okla.	5,619	99	352	84.4	41.2		
Ga.	2,891	104	88	85.0	40.8	Oreg.	2,372	106	120	54.8	27.4		
Hawaii	226	25	34	45.7	15.2	Oreg.	2,684	94	112	25.8	13.7		
Idaho	1,102	121	47	10.6	5.9	Pa.	4,244	64	389	121.5	59.6		
Ill.	5,800	78	507	149.9	69.5	R.I.	202	7	7	10.3	5.2		
Ind.	3,373	61	119	42.1	20.4	S.C.	1,051	57	51	18.4	9.3		
Iowa	2,588	97	143	36.1	17.8	S. Dak.	892	66	46	12.3	6.5		
Kans.	2,896	109	168	20.8	10.1	Tenn.	1,633	62	43	60.2	29.8		
Ky.	980	48	21	43.5	21.5	Texas	10,055	242	718	140.1	69.8		
La.	2,082	66	152	47.8	23.1	Utah	772	58	24	19.8	12.2		
Maine	596	43	97	10.8	5.4	Vt.	267	13	31	4.6	2.3		
Md.	1,549	15	67	21.3	10.6	Va.	1,727	46	115	33.8	16.6		
Mass.	1,919	26	91	49.7	23.8	Wash.	3,323	101	134	38.4	18.9		
Mich.	5,356	126	176	76.9	35.7	W. Va.	586	21	28	26.1	11.9		
Minn.	3,447	127	132	52.2	25.3	Wis.	2,432	99	151	47.1	22.2		
Miss.	1,393	67	86	24.6	12.3	Wyo.	600	42	45	9.1	5.2		
						Other areas <sup>4</sup>	496	24	10	34.5	18.8		

<sup>1</sup> Represents zero.<sup>1</sup> Includes gliders, dirigibles, and balloons.<sup>2</sup> Includes military airports with joint civil and military use.<sup>3</sup> Cumulative since enactment of Federal Airport Act, May 16, 1946, through Dec. 31, 1969.<sup>4</sup> Comprises Puerto Rico, American Samoa, Canton, Guam, Virgin Islands, and Wake Island.Source: Dept. of Transportation, Federal Aviation Administration; *FAA Statistical Handbook of Aviation*.

## No. 875. SCHEDULED AIR CARRIERS—AVAILABLE SERVICE AND UTILIZATION, AND TRAFFIC CARRIED: 1950 TO 1969

[In millions, except percent]

ITEM	1950	1955	1960	1964	1965	1966	1967	1968	1969
<b>SERVICE AND UTILIZATION</b>									
Available ton-miles <sup>1</sup>	2,426	5,289	9,384	16,302	19,661	23,505	30,777	37,223	42,779
Revenue ton-miles <sup>1</sup>	1,398	3,088	5,024	8,016	9,895	12,441	15,680	18,114	19,989
Ton-mile load factor <sup>2</sup> percent	57.6	58.4	53.5	49.2	50.3	52.9	50.9	48.7	46.5
Available seat-miles <sup>1</sup>	16,842	38,574	65,567	106,316	124,320	137,844	174,773	218,446	250,846
Revenue passenger-miles <sup>1</sup>	10,243	24,351	38,868	58,494	68,676	79,889	98,720	113,958	125,414
Passenger load factor <sup>2</sup> percent	60.8	63.1	59.3	55.0	55.2	58.0	56.5	52.6	49.9
Revenue plane-miles <sup>1</sup>	477	780	998	1,189	1,354	1,482	1,742	2,146	2,385
<b>TRAFFIC CARRIED (revenue ton-miles)</b>									
Total	1,398	3,088	5,024	8,016	9,895	12,441	15,680	18,114	19,988
Passenger <sup>2</sup>	1,001	2,368	3,733	5,630	6,629	7,736	9,558	11,023	12,147
U.S. mail:									
Priority	69	128	202	290	372	543	568	582	577
Nonpriority		15	39	81	111	209	409	675	757
Express	38	51	59	78	90	98	99	105	109
Freight	233	383	643	1,301	1,730	2,051	2,349	2,805	3,246
Charter flights	40	106	296	582	909	1,755	2,648	2,865	3,091
Excess baggage <sup>3</sup>	18	37	53	52	53	49	49	59	61

<sup>1</sup> Includes charter operations. <sup>2</sup> A passenger ton-mile represents 1 ton of passenger weight, including free baggage, transported 1 mile. <sup>3</sup> Includes foreign mail revenue ton-miles.Source: Air Transport Association of America, Washington, D.C.; *Air Transport Facts and Figures*.

# Scheduled Air Carriers

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## No. 876. SCHEDULED AIR CARRIERS—SUMMARY OF OPERATIONS: 1950 TO 1969

[As of Dec. 31 or for calendar years, except as noted. Operations between conterminous U.S. and Hawaii, Puerto Rico, and outlying areas included with International. Intra-Alaska included with domestic carriers and Mainland-Alaska with International, as follows: Number of operators and traffic data, for all years; fuel and financial data, beginning 1955; and personnel data, beginning 1960. See also *Historical Statistics, Colonial Times to 1957*, series Q 352, Q 354-362, and Q 384-393.]

ITEM	1950	1955	1960	1965	1967	1968	1969
Domestic operators <sup>1</sup>	48	40	39	40	36	35	(NA)
International operators <sup>1</sup>	6	7	10	9	8	7	(NA)
Total personnel employed <sup>2</sup>	82,786	122,203	162,771	206,834	269,890	295,025	(NA)
Domestic	61,903	95,548	133,717	169,952	223,380	244,742	(NA)
International	20,883	26,655	29,054	36,882	46,510	50,283	(NA)
Route miles in operation <sup>3</sup>	183,841	196,274	249,717	248,294	263,131	270,687	(NA)
Domestic	77,440	78,992	101,414	104,370	113,095	116,567	(NA)
International <sup>4</sup>	106,401	117,282	148,303	143,424	150,038	154,120	(NA)
Aircraft in operation <sup>5</sup>	1,220	1,409	1,867	1,896	2,123	2,249	2,363
Fixed wing	1,209	1,390	1,842	1,875	2,101	2,233	2,345
Four-engine		679	1,160	1,055	969	866	865
Three-engine turbojet		(NA)	(NA)	168	392	512	601
Twin-engine		709	677	615	713	833	867
Single-engine		2	5	37	27	22	12
Average available seats: <sup>6</sup>							
Domestic	37.5	51.2	65.5	89.2	94.4	100.8	105.8
International	41.0	56.4	89.9	129.1	132.2	135.6	138.9
Average speed (miles per hour):							
Domestic	180	208	235	314	354	373	390
International	218	244	307	451	482	476	477
Fuel consumed:							
Gasoline . . . . . mil. gal.	572	1,170	1,127	489	241	122	(NA)
Domestic . . . . . mil. gal.	418	912	922	448	223	113	(NA)
International . . . . . mil. gal.	154	258	205	41	18	9	(NA)
Jet fuel:							
Domestic . . . . . mil. gal.	-	2	988	3,368	5,325	6,455	(NA)
International . . . . . mil. gal.	-	-	343	1,195	1,983	2,267	(NA)
Revenue-miles flown (all scheduled services)							
mil.	464	763	983	1,336	1,813	2,124	2,360
Domestic . . . . . mil.	370	627	821	1,088	1,462	1,716	1,909
International . . . . . mil.	95	135	163	248	351	408	451
Revenue passengers carried . . . . . mil.	19	42	62	103	142	162	172
Domestic . . . . . mil.	17	38	56	92	128	146	154
International . . . . . mil.	2	3	6	11	14	16	17
Revenue passenger-miles flown:							
Domestic . . . . . millions	8,007	19,852	30,567	51,887	75,487	87,508	95,946
International . . . . . millions	2,214	4,499	8,306	16,789	23,259	26,451	29,468
Average passenger-mile rate:							
Domestic	\$0.0554	\$0.0536	\$0.0609	\$0.0606	\$0.0564	\$0.0561	(NA)
International	.0728	.0666	.0635	.0529	.0501	.0495	(NA)
Express and freight, ton-miles flown . . . mil.	213	328	579	1,540	2,111	2,506	2,853
Domestic . . . . . mil.	152	230	387	943	1,314	1,579	1,762
International . . . . . mil.	61	96	192	597	797	927	1,091
Mail, ton-miles flown:							
Domestic . . . . . mil.	48	89	136	226	406	564	611
International . . . . . mil.	26	61	103	254	560	679	654
Accidents (revenue operations): <sup>8</sup>							
Domestic, total	36	41	62	55	43	44	39
Fatal	4	8	10	6	8	11	8
Fatalities <sup>10</sup>	109	221	363	223	255	288	152
Passenger-fatalities per 100 million passenger-miles flown <sup>11</sup>	1.2	0.8	0.9	0.4	0.03	0.03	0.13
International, total	5	5	5	8	8	10	10
Fatal	2	1	2	1	-	2	-
Fatalities <sup>10</sup>	56	4	15	30	-	57	-
Passenger-fatalities per 100 million passenger-miles flown	2.1	(Z)	0.1	0.1	-	0.2	-

<sup>1</sup> Represents zero. NA Not available. Z Less than 0.05. <sup>2</sup> Excludes all-cargo operators.

<sup>2</sup> For types of personnel, see table 877. <sup>3</sup> Not compiled for intra-Alaska.

<sup>4</sup> As of Dec. 31, based on fourth quarter.

<sup>5</sup> Represents aircraft of the certificated route air carriers; excludes those used for crew training and general utility purposes, or held for disposal. Beginning 1960, excludes aircraft operated by the scheduled all-cargo carriers. Includes helicopters, not shown separately.

<sup>6</sup> Obtained by dividing passenger seat-miles by revenue-miles flown in passenger service.

<sup>7</sup> Excludes freight flown by certificated all-cargo operators and irregular carriers.

<sup>8</sup> Beginning 1960, includes military contract operations.

<sup>9</sup> Includes 2 midair collisions nonfatal to air carrier occupants; excluded in computation of fatal accidents.

<sup>10</sup> Includes crew members. <sup>11</sup> Excludes passenger deaths occurring in dynamite accidents, as follows: Nov. 1, 1955, 39; Jan. 6, 1960, 29.

Source: Dept. of Transportation, Federal Aviation Administration; *FAA Statistical Handbook of Aviation*. Includes data from Civil Aeronautics Board.

## No. 877. SCHEDULED AIR CARRIERS—PERSONNEL AND PAYROLL: 1965 TO 1968

[As of December 31 or for calendar years. See also headnote, table 876]

TYPE OF PERSONNEL	1965			1967			1968		
	Number (1,000)	Payroll (mill. dol.)	Average salary	Number (1,000)	Payroll (mill. dol.)	Average salary	Number (1,000)	Payroll (mill. dol.)	Average salary
Total domestic <sup>1</sup>	170.0	1,443	\$8,525	223.4	2,048	\$9,170	244.7	2,431	\$9,932
Pilots and copilots	14.5	289	10,946	20.1	423	21,068	21.2	520	24,568
Other flight personnel	3.9	53	13,468	6.0	74	12,286	7.0	104	14,938
Purrs, stewards, stewardesses	14.2	73	5,144	20.5	117	5,728	24.3	147	6,048
Communications personnel	2.0	13	6,448	2.1	14	6,611	2.3	16	7,100
Mechanics <sup>2</sup>	35.4	282	7,985	42.3	374	8,836	43.9	409	9,311
Aircraft and traffic servicing	45.8	331	7,228	59.4	465	7,832	66.3	557	8,394
Office employees	34.6	239	6,924	47.6	347	7,296	51.0	367	7,771
Total international <sup>1</sup>	36.9	269	7,294	46.5	382	8,205	50.3	435	8,656
Pilots and copilots	1.9	42	21,758	2.6	66	25,173	2.8	73	26,140
Other flight personnel	0.8	13	17,110	1.2	21	17,345	1.2	24	19,763
Purrs, stewards, stewardesses	3.0	19	6,267	4.1	28	6,893	4.6	34	7,283
Communications personnel	1.1	5	4,295	1.2	6	5,106	1.1	6	5,484
Mechanics <sup>2</sup>	5.3	42	7,853	6.5	58	8,917	6.9	61	8,840
Aircraft and traffic servicing	10.8	61	5,698	13.0	86	6,185	15.2	102	6,738
Office employees	9.0	53	5,918	10.7	60	6,439	11.7	80	6,878

<sup>1</sup> Includes personnel not shown separately.<sup>2</sup> Includes other maintenance personnel.

## No. 878. SUPPLEMENTAL AIR CARRIERS—SUMMARY OF OPERATIONS: 1955 TO 1968

[In thousands, except as indicated. Refers to carriers operating by authority of letters of registration granted by the Civil Aeronautics Board. Includes international operations; see headnote, table 876. Figures shown for military cover activities performed under charter or other contract with the Department of Defense.]

ITEM	1955	1960	1964	1965	1966	1967	1968
Number of operators	50	30	15	13	13	13	13
Revenue passenger-miles... mil.	1,396	2,208	1,502	2,489	4,125	5,997	8,872
Commercial..... mil.	716	671	536	1,069	1,554	2,672	4,303
Military..... mil.	680	1,537	906	1,420	2,572	3,425	4,569
Revenue cargo ton-miles... mil.	75	120	268	298	425	442	405
Commercial..... mil.	21	5	37	49	54	47	63
Military..... mil.	53	115	231	249	371	395	432
Operating revenue	\$76,824	\$83,447	\$105,806	\$140,981	\$209,250	\$258,631	\$325,654
Operating expenses	\$78,087	\$85,295	\$89,770	\$116,906	\$172,272	\$223,165	\$282,685
Operating profit or loss	\$3,757	-\$1,849	\$10,036	\$24,075	\$36,978	\$35,466	\$42,960

Source of tables 877 and 878: Dept. of Transportation, Federal Aviation Administration; *FAA Statistical Handbook of Aviation*. Data from Civil Aeronautics Board.

## No. 879. EMPLOYMENT, HOURS, AND EARNINGS IN AIRCRAFT INDUSTRIES—ANNUAL AVERAGES: 1950 TO 1969

ITEM	1950	1955	1960	1965	1966	1967	1968	1969
<b>EMPLOYMENT (1,000)</b>								
Total	283	761	674	619	751	825	849	805
Aircraft	188	467	371	330	419	469	404	479
Aircraft engines and parts	57	168	171	188	210	220	209	196
Other aircraft parts and equipment	38	127	132	101	122	136	146	130
<b>HOURS AND EARNINGS</b>								
Average weekly hours:								
Aircraft industries	41.4	41.4	40.6	41.2	42.9	42.2	41.9	41.9
Aircraft engines and parts industries	41.7	40.6	41.1	42.1	43.4	42.5	41.4	40.9
Average weekly earnings:								
Aircraft industries	\$67	\$90	\$110	\$130	\$144	\$147	\$153	\$163
Aircraft engines and parts industries	\$69	\$86	\$112	\$133	\$144	\$146	\$151	\$158
Average hourly earnings:								
Aircraft industries	\$1.62	\$2.17	\$2.71	\$3.16	\$3.34	\$3.49	\$3.64	\$3.90
Aircraft engines and parts industries	\$1.66	\$2.13	\$2.73	\$3.17	\$3.31	\$3.42	\$3.65	\$3.87

Source: Dept. of Transportation, Federal Aviation Administration; *FAA Statistical Handbook of Aviation*. Data from Dept. of Labor, Bureau of Labor Statistics.

## No. 880. CIVIL AIRCRAFT SHIPMENTS: 1950 TO 1969

[Represents manufacturers' shipments of complete aircraft. Includes both domestic and export output]

ITEM	1950	1955	1960	1964	1965	1966	1967	1968	1969
Total	3,520	4,820	8,181	10,067	12,646	16,397	14,479	14,969	13,541
Transports	129	113	238	158	221	322	500	702	509
General aviation	3,301	4,563	7,726	9,459	12,053	15,723	13,536	13,749	12,522
Single-engine:									
1- to 3-place	(NA)	786	1,366	2,187	3,545	5,744	4,873	4,807	4,447
4-place and over	(NA)	2,969	5,072	5,625	6,478	7,482	6,657	6,972	5,687
Multimotor	(NA)	808	1,288	1,647	2,030	2,497	2,006	2,270	2,388
Rotorcraft	(NA)	144	217	450	372	352	443	518	510

NA Not available.

## No. 881. AIRCRAFT—BACKLOG, NEW ORDERS, AND SALES: 1965 TO 1968

[Reported by manufacturers of complete aircraft, aircraft engines, and propellers]

ITEM	1965		1966		1967		1968	
	Total (mil. dol.)	Percent military	Total (mil. dol.)	Percent military	Total (mil. dol.)	Percent military	Total (mil. dol.)	Percent military
Net new orders	22,188	53.2	27,223	53.0	26,900	62.8	27,108	55.5
Aircraft and parts	7,951	44.4	12,455	49.5	10,907	54.7	11,621	42.8
Aircraft engines and parts	2,690	66.6	3,411	57.9	3,266	(NA)	2,664	54.2
Missiles and parts	6,739	52.0	5,054	55.0	7,318	75.7	6,453	72.2
Other products and services	4,803	(X)	6,303	(X)	5,419	(X)	6,430	(X)
Net sales	17,016	59.2	20,227	59.1	23,444	61.6	25,592	59.3
Aircraft and parts	6,343	63.5	6,630	61.6	9,082	58.9	10,885	52.3
Aircraft engines and parts	1,714	66.0	2,095	65.5	2,812	63.9	2,965	57.8
Missiles and parts	5,819	52.4	6,241	50.9	6,054	63.2	6,076	70.4
Other products and services	4,140	(X)	5,261	(X)	5,496	(X)	5,666	(X)
Backlog, Dec. 31	20,385	57.5	27,547	52.1	30,722	54.3	30,749	51.5
Aircraft and parts	8,885	50.2	14,655	44.5	16,377	43.2	16,608	36.1
Aircraft engines and parts	2,503	65.8	3,824	58.7	4,251	100.0	3,951	54.4
Missiles and parts	5,480	57.7	4,510	50.6	5,704	76.1	5,083	86.0
Other products and services	3,517	(X)	4,558	(X)	4,390	(X)	5,107	(X)

X Not applicable. <sup>1</sup> Includes propeller and propeller parts.Source of tables 880 and 881: Dept. of Transportation, Federal Aviation Administration; *F.A.A. Statistical Handbook of Aviation*. Includes data from Dept. of Commerce, Bureau of the Census: *Current Industrial Reports*.

## No. 882. EXPORTS OF AIRCRAFT AND AIRCRAFT PARTS AND ACCESSORIES: 1960 TO 1969

[Value in millions of dollars. See *Historical Statistics, Colonial Times to 1957*, series Q 349-350, for number and value of aircraft exported]

ITEM	1960		1965		1968		1969 (prel.)	
	Number of units	Value	Number of units	Value	Number of units	Value	Number of units	Value
Aircraft, parts, and accessories	(X)	1,329	(X)	1,798	(X)	2,812	(X)	2,849
Commercial and civilian aircraft <sup>1</sup>	2,836	537	3,120	477	3,530	1,398	3,822	1,235
Cargo transports, new	—	—	4	15	6	24	3	14
Passenger transports, new	(NA)	(NA)	61	262	177	837	144	707
Passenger/cargo combinations, new	(NA)	(NA)	12	76	56	339	34	210
Personal and utility type:								
Single engine, new	1,527	24	2,031	31	2,149	33	1,762	35
Multiple engine, new			426	38	579	64	760	91
Rotary wing, new	82	8	177	16	243	31	264	31
Used, rebuilt, modified, or converted <sup>2</sup>	565	26	406	39	320	60	384	130
Internal combustion engines, new	1,464	4	1,684	7	1,777	14	2,524	11
Aircraft engines, used	1,558	10	1,273	10	1,082	9	899	8
Aircraft components, parts, and access	(X)	778	(X)	1,303	(X)	1,390	(X)	1,594

<sup>1</sup> Represents zero. NA Not available. X Not applicable.<sup>2</sup> Through 1965, includes new aircraft not elsewhere classified, not shown separately.<sup>2</sup> Aircraft only; includes aircraft changed from military to nonmilitary type.Source: Dept. of Commerce, Bureau of the Census; *Current Industrial Reports*, Series M37G.

No. 883. SUMMARY OF AIRBORNE IMPORTS AND EXPORTS—SHIPPING WEIGHT, 1965, 1967, AND 1968, AND VALUE, 1965 AND 1968

[Weight in millions of pounds, value in millions of dollars, except as indicated. Includes trade of Puerto Rico]

CONTINENT AND CUSTOMS DISTRICT	IMPORTS					EXPORTS				
	Weight			Value		Weight			Value	
	1965	1967	1968	1965	1968	1965	1967	1968	1965	1968
Total, all carriers <sup>1</sup>	192.3	305.5	430.6	1,316	2,548	457.3	549.1	657.5	2,289	3,842
North America	33.1	49.8	70.5	125	243	127.3	152.3	183.8	366	504
South America	19.8	19.2	21.3	48	71	71.3	71.3	77.9	194	283
Europe	111.5	178.5	253.9	920	1,033	182.0	249.8	303.2	1,284	2,204
Asia	20.7	54.5	80.2	171	491	29.1	51.6	61.2	236	555
Australia and Oceania	0.4	1.3	2.3	6	17	5.0	8.6	13.1	52	77
Africa	0.8	1.4	1.8	11	42	7.4	10.4	14.6	38	75
U.S. carriers <sup>1</sup>	95.7	128.4	198.7	586	1,171	175.6	199.0	254.1	867	1,407
Percent of all carriers	50.0	42.0	46.1	44.5	46.0	38.4	36.2	38.6	37.9	38.6
North America	15.7	19.7	35.0	56	119	56.5	70.9	89.8	147	206
South America	0.4	7.2	9.1	22	34	19.2	20.2	27.9	64	99
Europe	55.6	65.8	101.9	392	675	63.8	78.2	101.6	446	709
Asia	17.6	32.7	51.6	111	327	15.1	22.0	25.3	106	229
Australia and Oceania	(Z)	0.3	0.8	2	7	1.1	2.1	3.7	10	18
Africa	0.3	0.3	0.5	3	10	3.0	2.4	3.9	16	21
Customs district:										
New York	113.1	150.3	217.2	977	1,704	224.8	269.1	332.7	1,396	2,336
Florida	26.7	30.6	40.9	48	66	116.1	105.5	115.5	214	260
Los Angeles	7.4	12.2	18.3	56	158	9.4	19.2	26.5	97	283
San Francisco	10.3	22.3	32.7	68	202	16.9	22.5	23.8	189	223
Chicago	10.0	13.0	16.7	65	147	26.8	29.4	34.1	138	203
Other	24.8	77.0	104.8	101	273	63.4	103.3	125.0	286	533

Z. Less than 50,000 pounds.

<sup>1</sup> Beginning 1967, data for imports include shipments valued at \$251; exports for all years include shipments of "Special Category" commodities and estimated shipments valued under \$100, which are excluded from totals.

Source: Dept. of Commerce, Bureau of the Census; summary reports, FT 986, *United States Airborne Foreign Trade*.

No. 884. UNITED STATES RECEIPTS AND PAYMENTS FOR INTERNATIONAL TRANSPORTATION: 1950 TO 1969

[In millions of dollars. Data are international transportation transactions recorded for balance of payment purposes (see table 1205). Receipts include freight on exports carried by U.S. operated carriers and foreign carrier expenditures in U.S. ports. Payments include freight on imports carried by foreign carriers and U.S. port expenditures abroad. Freight on exports carried by foreign carriers is excluded since such payments are directly or indirectly for foreign account. Similarly, freight on U.S. imports carried by U.S. carriers is a domestic rather than an international transaction. Minus sign (—) denotes decrease. See *Historical Statistics, Colonial Times to 1957*, series U 170 and U 177, for totals.]

ITEM	1950	1955	1960	1964	1965	1966	1967	1968	1969 (proj.)
Total receipts	1,033	1,406	1,782	2,317	2,414	2,608	2,775	2,924	3,122
Ocean transportation	850	1,137	1,337	1,725	1,731	1,843	1,843	1,916	1,914
Export freight earnings	380	448	428	599	510	531	522	541	515
Freight earnings on shipments between foreign countries	110	106	136	150	153	137	144	148	134
Passenger fares	20	23	19	11	9	10	8	6	8
Port expenditures	313	548	746	956	1,041	1,154	1,162	1,220	1,253
Charter hire	36	12	8	9	9	11	7	6	4
Air transportation	108	183	358	484	571	653	817	893	1,091
Export freight earnings	17	33	55	63	91	112	126	127	166
Passenger fares	68	97	156	231	262	307	363	405	441
Port expenditures	23	53	147	190	218	234	328	361	484
Other transportation	66	86	87	108	112	112	115	115	117
Total payments	818	1,204	1,915	2,462	2,675	2,922	2,990	3,248	3,464
Ocean transportation	643	946	1,333	1,717	1,806	1,933	1,876	2,015	2,056
Import freight payments	295	480	780	945	1,083	1,187	1,161	1,261	1,275
Passenger fares	121	138	212	215	210	200	196	190	209
Port expenditures	138	153	167	317	281	294	271	289	267
Charter hire	89	175	174	240	232	252	249	275	304
Air transportation	106	183	504	651	776	896	1,020	1,136	1,312
Import freight payments	2	7	22	26	40	47	58	78	124
Passenger fares	26	68	301	430	510	555	636	695	792
Port expenditures	78	108	181	195	226	294	327	363	305
Other transportation	69	75	78	94	93	94	97	97	97
Receipts balance	215	202	-133	-145	-261	-314	-215	-324	-342

Source: Dept. of Commerce, Office of Business Economics; *Survey of Current Business*, June issues.

# Cargo Tonnage—Imports and Exports

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## No. 885. WATERBORNE COMMERCE, FOREIGN AND DOMESTIC—CARGO TONNAGE: 1940 TO 1968

[In millions of short tons. Includes Puerto Rico and outlying areas. Import and export figures differ slightly from those shown in tables 887 and 888, due to minor differences in basic concepts which are explained in the source. See also *Historical Statistics, Colonial Times to 1957*, series Q 216-229]

CLASS	1940	1945	1950	1955	1960	1965	1967	1968
Net total	608	619	821	1,016	1,100	1,273	1,337	1,396
Foreign commerce								
Imports, through seaports	111	172	169	271	339	444	466	508
Exports, through seaports	41	45	96	144	198	245	248	279
Imports, Great Lakes ports	50	100	44	95	105	142	162	167
Exports, Great Lakes ports	4	7	6	9	13	25	28	32
Domestic commerce <sup>1</sup>								
Coastwise, between ports	497	447	651	745	761	829	871	888
Great Lakes, between ports	157	91	183	196	209	202	215	214
Local traffic of seaports, Great Lakes ports, and inland waterways ports	141	168	170	185	155	154	154	151
Traffic between ports and river ports <sup>2</sup>	98	98	107	113	104	103	102	91
Traffic between ports of outlying areas of the United States	70	87	101	250	291	370	399	420
	(6)	(3)	1	2	1	1	1	2

<sup>1</sup> For 1940 and 1945, approximate net total, excluding duplications in domestic traffic.

<sup>2</sup> Represents traffic among ports and communities mainly utilizing inland waterways.

<sup>3</sup> Included in other types of domestic traffic.

Source: Dept. of the Army, Corps of Engineers; through 1950, *Annual Report of Chief of Engineers*, Part 2; thereafter, *Waterborne Commerce of the United States*.

## No. 886. SHIPMENTS OF EXPORTS AND IMPORTS, BY METHOD OF TRANSPORT: 1950 TO 1969

[Value in millions of dollars, except percent; shipping weight in millions of pounds. Export data include both domestic and foreign; import data for general imports only]

ITEM	1950	1955	1960	1965	1967	1968	1969
<b>EXPORTS<sup>1</sup></b>							
Value, all methods of transportation	10,275	15,547	20,575	27,478	31,526	34,636	37,988
Vessel	(NA)	9,227	13,142	16,926	18,772	19,689	20,073
Percent of total	(NA)	59.4	63.9	61.6	59.5	58.8	52.8
Air	(NA)	(NA)	(NA)	2,289	3,233	3,820	5,129
Shipping weight:							
Vessel	(NA)	225,169	248,456	343,461	375,198	380,339	390,045
Air	(NA)	(NA)	(NA)	457	540	655	860
<b>IMPORTS<sup>2</sup></b>							
Value, all methods of transportation	8,852	11,384	14,054	21,306	26,812	33,226	36,062
Vessel	(NA)	8,073	11,106	14,943	17,492	21,258	21,614
Percent of total	(NA)	70.9	75.8	69.9	65.2	64.0	59.9
Air	(NA)	(NA)	(NA)	1,316	1,947	2,558	3,190
Shipping weight:							
Vessel	(NA)	283,069	398,085	511,509	512,686	567,345	576,369
Air	(NA)	(NA)	(NA)	192	305	431	614

NA. Not available.

<sup>1</sup> Prior to 1960, export vessel and air data include estimated shipments under \$100; thereafter \$251 and under, but exclude vessels under their own power or afloat, and "Special Category" and mail (parcel post) shipments.

<sup>2</sup> Import vessel and air data include estimated shipments under \$251, but exclude vessels under their own power or afloat.

Source: Dept. of Commerce, Bureau of the Census; monthly report, FT 990, *Highlights of U.S. Export and Import Trade*, and unpublished data.

## No. 887. WATERBORNE IMPORTS AND EXPORTS—CARGO TONNAGE, BY COASTAL DISTRICT: 1945 TO 1968

[In thousands of short tons. See headnote, table 888]

DISTRICT	1945	1950	1955	1960	1964	1965	1966	1967	1968
<b>IMPORTS</b>									
Atlantic ports	30,748	76,062	105,990	135,313	149,367	163,871	172,595	184,254	180,813
Gulf ports	5,675	10,930	17,345	27,304	32,255	36,773	39,408	38,615	41,544
Pacific ports	3,003	4,095	9,038	23,281	28,001	29,995	27,426	26,223	28,292
Great Lakes ports	(NA)	5,616	8,751	12,932	24,151	24,957	26,646	27,713	32,100
<b>EXPORTS</b>									
Atlantic ports	39,609	15,228	54,906	44,902	57,464	54,943	56,756	57,365	58,265
Gulf ports	14,737	16,818	22,500	36,730	58,529	58,717	67,066	66,028	60,742
Pacific ports	7,258	7,270	13,394	19,851	25,043	26,445	30,895	36,486	39,146
Great Lakes ports	(NA)	23,370	21,996	22,905	30,395	31,705	31,772	27,549	30,330

NA. Not available.

Source: Dept. of Commerce, Bureau of the Census; *Foreign Commerce and Navigation of the United States*, annual report, FT 985, *U.S. Waterborne Foreign Trade*, and unpublished data.

## Transportation—Air and Water

## No. 888. WATERBORNE IMPORTS AND EXPORTS—CARGO TONNAGE, BY FLAG OF CARRIER VESSEL: 1950 TO 1968

[In thousands of short tons. Beginning July 1950, excludes commodities classified for security reasons as "Special Category." For 1955 and 1960, exports exclude shipments individually valued under \$600. For 1964 and later years, exports exclude shipments to Canada individually valued under \$2,000 and to other countries under \$600. Under \$100 shipments are excluded for all years. Beginning 1955, imports exclude shipments under 2,000 pounds shipping weight regardless of value, as well as shipments valued at less than \$100 regardless of shipping weight. For January 1960 through June 1965, imports exclude formal entry shipments valued at less than \$100 and informal entry shipments valued under \$251. For July–December 1965 and later years, imports exclude all shipments under \$251. For further coverage details, see report FT 985, *U.S. Waterborne Foreign Trade* published monthly by Bureau of the Census. See also *Historical Statistics, Colonial Times to 1967*, series Q 210–215.]

YEAR	Total trade	Percent by U.S. flag	IMPORTS BY FLAG OF CARRIER VESSEL				EXPORTS BY FLAG OF CARRIER VESSEL			
			Total	U.S.	Foreign	Percent U.S.	Total	U.S.	Foreign	Percent U.S.
<b>TOTAL</b>										
1950	159,389	39.3	96,703	42,268	54,435	43.7	62,685	20,370	42,306	32.5
1955	253,919	23.5	141,123	37,409	103,715	26.5	112,796	22,144	90,652	19.0
1960	322,717	12.3	198,830	19,627	170,203	9.9	123,887	20,133	103,754	16.3
1964	405,205	9.9	233,774	16,278	217,496	7.0	171,431	23,937	147,494	14.0
1965	427,407	8.1	255,590	15,573	240,023	6.1	171,811	19,048	152,762	11.1
1966	452,053	7.8	266,075	15,598	250,477	5.9	185,078	17,358	168,020	9.3
1967	444,233	6.5	256,806	13,526	243,280	5.3	187,427	15,365	172,062	8.2
1968	477,234	6.1	282,751	16,321	266,430	5.8	194,483	15,590	178,884	8.0
<b>DRY CARGO</b>										
1950	100,189	31.2	46,611	14,823	31,788	31.8	53,578	16,429	37,140	30.7
1955	169,231	23.2	68,437	19,855	48,582	29.0	100,794	19,762	81,032	19.6
1960	202,407	15.2	94,031	13,813	81,118	14.6	107,666	16,080	90,586	15.8
1964	266,816	12.0	113,371	11,967	101,404	10.6	153,445	20,083	133,362	13.1
1965	273,928	9.3	123,318	10,369	112,949	8.4	150,610	15,223	135,387	10.0
1966	297,486	8.1	130,342	10,487	119,855	8.0	167,144	13,519	153,625	8.0
1967	294,069	8.1	127,331	11,103	116,228	8.7	166,738	12,668	154,080	7.0
1968	315,694	7.1	137,700	10,423	127,276	7.6	177,994	13,267	164,727	7.4
<b>TANKER CARGO</b>										
1950	59,199	53.0	50,092	27,445	22,647	54.8	9,107	3,950	5,157	43.4
1955	84,688	23.5	72,686	17,554	55,133	24.2	12,002	2,382	9,620	19.8
1960	120,219	7.5	103,898	6,814	98,084	5.6	16,321	3,163	13,168	19.3
1964	138,390	5.9	120,403	4,311	116,092	3.6	17,987	3,854	14,133	21.4
1965	153,478	5.9	132,278	5,204	127,074	3.9	21,200	3,825	17,375	18.0
1966	154,567	5.8	135,733	5,112	130,621	3.8	18,834	3,830	14,995	20.4
1967	150,165	3.4	120,476	2,424	127,052	1.9	20,689	2,707	17,982	13.1
1968	161,541	5.0	145,032	5,897	130,184	4.1	16,489	2,333	14,157	14.1

Source: Dept. of Commerce, Bureau of the Census; *Foreign Commerce and Navigation of the United States*, annual report, FT 985, *U.S. Waterborne Foreign Trade*, and unpublished data.

## No. 889. WATERBORNE IMPORTS AND EXPORTS—VALUE OF TRADE, BY COASTAL DISTRICT: 1965, 1967, AND 1968

[In millions of dollars. Includes trade of Puerto Rico with foreign countries]

DISTRICT AND TYPE OF VESSEL	TOTAL TRADE			IMPORTS			EXPORTS		
	1965	1967	1968	1965	1967	1968	1965	1967	1968
<b>Total</b>									
Total	31,868	36,070	40,498	14,941	17,434	21,139	16,927	18,636	19,359
Atlantic	18,132	20,470	22,029	9,743	11,295	13,346	8,389	9,175	9,583
Dry cargo	16,570	18,849	21,095	8,266	9,804	11,637	8,304	9,045	9,458
Tanker	1,562	1,021	1,834	1,477	1,401	1,709	85	130	126
Gulf	6,739	7,628	8,354	1,761	2,106	2,634	4,978	5,522	5,720
Dry cargo	5,584	6,779	7,532	1,657	1,068	2,470	3,927	4,811	5,053
Tanker	1,156	849	822	105	138	155	1,051	711	667
Pacific	4,789	5,760	6,058	2,410	2,877	3,748	2,370	2,883	2,910
Dry cargo	4,353	5,396	6,319	2,097	2,638	3,516	2,256	2,763	2,808
Tanker	436	364	339	313	244	232	120	107	107
Great Lakes	2,209	2,212	2,557	1,028	1,156	1,411	1,181	1,056	1,146
Dry cargo	2,141	2,171	2,523	1,013	1,145	1,401	1,128	1,026	1,122
Tanker	68	41	34	15	11	10	53	30	24

Source: Dept. of Commerce, Bureau of the Census; annual report, FT 985, *U.S. Waterborne Foreign Trade*.

# Inland Waterways

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**No. 890. FREIGHT CARRIED ON INLAND WATERWAYS, BY SYSTEM: 1945 TO 1968**  
 [In millions of ton-miles. Excludes Alaska and Hawaii, except as noted]

SYSTEM	1945	1950	1955	1960	1965	1967	1968
Total.....	142,737	163,344	216,508	220,253	262,421	281,392	291,409
Atlantic coast rivers.....	1,036	6,497	27,042	28,583	27,781	28,760	25,938
Gulf coast rivers.....	345	1,229	13,860	16,932	21,808	25,002	25,757
Pacific coast rivers.....	1,655	1,686	4,736	6,001	6,630	6,242	7,303
Mississippi River System <sup>1</sup> .....	19,595	33,598	52,019	69,257	96,593	114,579	120,339
Great Lakes System <sup>2</sup> .....	120,205	120,334	118,850	99,480	109,600	106,800	112,073

<sup>1</sup> Comprises main channels and all tributaries of the Mississippi, Illinois, Missouri, and Ohio Rivers.

<sup>2</sup> Includes other waterways, canals and connecting channels, and, beginning 1960, Alaskan waterways.

Source: Dept. of the Army, Corps of Engineers; through 1950, *Annual Report of the Chief of Engineers*, Part 2; thereafter, *Waterborne Commerce of the United States*.

**No. 891. FREIGHT CARRIED ON GREAT LAKES SYSTEM: 1968**

[In millions of ton-miles]

AREA	Total	DOMESTIC				FOREIGN	
		Lakewise	Coast-wise	Internal	Local	Canadian	Overseas
Total.....	112,073	75,335	56	600	93	24,717	11,273
Lake Superior.....	25,498	22,656	-	-	-	2,110	723
St. Marys River.....	4,797	4,230	-	-	-	448	119
Lake Michigan, including Port of Chicago <sup>1</sup> .....	19,762	14,194	3	457	72	3,302	1,074
Lake Huron.....	24,569	18,093	1	1	4	4,171	1,701
St. Clair River, including channels in Lake St. Clair.....	6,025	4,640	-	-	-	988	408
Detroit River.....	3,319	2,510	2	2	-	520	280
Lake Erie, including upper Niagara River.....	17,376	8,318	23	53	17	6,301	2,684
Welland Canal.....	1,255	11	3	12	-	895	334
Lake Ontario, including lower Niagara River.....	5,825	57	16	70	-	3,700	1,982
St. Lawrence River, between International Boundary Line and Lake Ontario.....	3,647	11	9	4	-	2,233	1,380

- Represents zero.

<sup>1</sup> Comprises Chicago Harbor, North Branch, South Branch, Sanitary Ship Canal, Calumet-Sag Channel, Lake Calumet, Calumet Harbor and River.

Source: Dept. of the Army, Corps of Engineers; *Waterborne Commerce of the United States*.

**No. 892. COMMERCE OF SELECTED GREAT LAKES PORTS: 1950 TO 1968**

[In thousands of short tons (cargo). Comprises foreign, lakewise, and coastwise shipping]

PORT	RECEIPTS				SHIPMENTS			
	1950	1955	1960	1968	1950	1955	1960	1968
Total.....	175,637	193,591	168,043	183,305	193,511	207,538	178,287	181,670
Ashtabula Harbor, Ohio.....	10,447	9,455	7,773	6,550	3,302	3,586	2,450	1,656
Buffalo, N.Y., Port of.....	16,458	19,318	15,595	14,008	2,417	2,436	1,226	820
Chicago, Ill., Port of.....	15,813	16,872	12,303	13,974	4,003	6,349	8,411	9,552
Cleveland Harbor, Ohio.....	17,375	19,744	17,113	22,515	382	358	511	557
Conneaut Harbor, Ohio.....	9,562	14,139	6,570	7,812	2,522	994	588	6,538
Detroit, Mich., Port of.....	21,090	24,295	25,334	31,162	1,298	1,626	1,892	1,182
Duluth-Superior, Minn. and Wis.....	10,117	7,142	5,155	3,690	53,009	61,156	37,512	34,132
Indiana Harbor, Ind.....	10,355	13,695	12,116	13,419	5,182	6,386	7,059	4,610
Lorain Harbor, Ohio.....	8,153	5,563	5,036	5,060	3,204	2,258	1,659	5,206
Milwaukee Harbor, Wis.....	7,357	7,157	6,861	4,470	1,421	1,532	1,047	1,822
Sandusky Harbor, Ohio.....	1	1	38	18	9,822	7,961	5,616	6,831
Toledo Harbor, Ohio.....	4,640	6,504	5,870	6,871	29,307	28,710	27,815	27,464
All other.....	44,269	49,708	48,279	53,856	77,492	84,236	81,901	81,491

<sup>1</sup> Source: Dept. of the Army, Corps of Engineers; 1950, *Annual Report of the Chief of Engineers*, Part 2; thereafter, *Waterborne Commerce of the United States*.

## Transportation—Air and Water

## No. 893. COMMERCE OF SELECTED UNITED STATES PORTS: 1968

[In thousands of short tons (cargo). Excludes Great Lakes. In addition to commerce shown here, many ports have (a) commerce with ports on internal rivers and canals; (b) purely local port traffic]

PORT	Im- ports	Ex- ports	COASTWISE		PORT	Im- ports	Ex- ports	COASTWISE	
			Re- ceipts	Ship- ments				Re- ceipts	Ship- ments
Total	278,827	166,580	214,251	214,251	Port Everglades Harbor, Fla.	2,205	208	5,306	262
ATLANTIC COAST PORTS					Miami Harbor, Fla.	1,298	302	315	183
Portland Harbor, Maine	22,669	1	3,766	568	San Juan Harbor, P.R.	3,673	168	2,887	904
Portsmouth Harbor, N.H.	867	(Z)	961	5	GULF COAST PORTS				
Salem Harbor, Mass.	524	—	955	5	Charlotte Harbor, Fla.	196	786	—	1,104
Boston, Mass.	8,495	735	11,124	1,248	Tampa Harbor, Fla.	2,050	10,525	10,463	3,333
Fall River Harbor, Mass.	349	—	2,780	51	Mobile Harbor, Ala.	8,885	2,236	159	1,601
Providence River and Harbor, R.I.	1,770	197	6,295	584	New Orleans, La.	6,711	21,057	1,798	26,266
New Haven Harbor, Conn.	2,790	207	6,354	1,630	Baton Rouge, La.	6,247	4,981	839	9,991
Bridgeport Harbor, Conn.	1,137	63	1,815	360	Lake Charles, La.	172	1,210	196	2,420
Norwalk Harbor, Conn.	—	—	1,105	—	Galveston, Tex.	353	2,018	173	45
Port of New York, N.Y., and N.J.	53,589	6,767	28,316	21,076	Texas City, Tex.	30	335	700	4,593
Hempstead Harbor, N.Y.	—	—	1,913	2,508	Houston, Tex.	5,085	11,608	2,634	15,554
Port Jefferson Harbor, N.Y.	582	(Z)	1,625	40	Corpus Christi, Tex.	2,866	2,285	155	11,076
Port of Albany, N.Y.	784	266	2,126	24	PACIFIC COAST PORTS				
Delaware River and tributaries	50,405	3,084	28,912	8,017	Long Beach Harbor, Calif.	3,745	4,966	3,133	2,280
Baltimore Harbor and Channels, Md.	19,069	5,290	3,645	1,403	Los Angeles Harbor, Calif.	5,230	4,746	6,035	5,840
Norfolk Harbor, Va.	3,662	27,742	1,045	2,314	San Francisco Bay Area, Calif.	6,117	5,898	15,340	8,317
Port of Newport News, Va.	633	7,909	2	889	Coos Bay, Oreg.	(Z)	2,551	364	369
Port of Wilmington, N.C.	1,383	196	1,989	146	Portland, Oreg.	1,084	3,906	4,080	261
Charleston Harbor, S.C.	2,103	915	2,777	97	Longview, Wash.	227	2,814	572	67
Savannah Harbor, Ga.	2,317	1,147	1,904	123	Tacoma Harbor, Wash.	1,942	2,247	294	116
Jacksonville Harbor, Fla.	3,650	1,540	3,854	515	Seattle Harbor, Wash.	2,419	1,384	2,921	999
					Honolulu Harbor, Hawaii	1,313	151	3,208	2,156

— Represents zero. Z Less than 500 tons.

<sup>1</sup> Includes data for ports not shown separately.

Source: Dept. of the Army, Corps of Engineers; *Waterborne Commerce of the United States*.

## No. 894. FEDERAL EXPENDITURES FOR CIVIL FUNCTIONS OF THE CORPS OF ENGINEERS, UNITED STATES ARMY: 1940 TO 1969

[In thousands of dollars. For years ending June 30. Includes Puerto Rico and outlying areas. Represents funds actually expended under the direction of the Chief of Engineers for maintenance and improvement of rivers and harbors, flood control, and other miscellaneous works]

YEAR	Amount	YEAR	Amount	YEAR	Amount	YEAR	Amount
1940	213,880	1947	269,380	1954	539,687	1962	964,964
1941	220,734	1948	380,616	1955	511,587	1963	1,092,579
1942	198,041	1949	572,830	1956	556,724	1964	1,096,564
1943	222,053	1950	634,534	1957	666,433	1965	1,210,765
1944	175,589	1951	620,581	1958	718,532	1966	1,291,223
1945	184,216	1952	597,102	1959	808,427	1967	1,265,033
1946	168,957	1953	635,512	1960	808,573	1968	1,275,392
				1961	938,032	1969	1,193,970

Source: Dept. of the Army, Corps of Engineers; annual report, *Statement of Costs*.

# Inland Waterways—Panama Canal—Employees

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## No. 895. FREIGHT CARRIED ON MISSISSIPPI RIVER SYSTEM: 1940 TO 1968

[Net traffic. Comprises main channels and all tributaries of the Mississippi, Illinois, Missouri, and Ohio Rivers]

YEAR	TRAFFIC IN SHORT TONS (1,000)					TRAFFIC IN TON-MILES (millions)				
	Total	Inland	Coast-wise	Foreign		Total	Inland	Coast-wise	Foreign	
				Imports	Exports				Imports	Exports
1940	88,980	73,174	9,001	3,157	3,649	13,934	11,578	1,523	385	447
1945	95,543	82,081	4,954	3,114	5,394	19,595	17,738	849	340	668
1950	138,145	114,697	13,877	4,395	5,176	33,598	30,282	2,074	599	643
1955	194,363	163,760	16,080	6,296	8,248	52,019	47,418	2,473	1,046	1,082
1960	233,959	188,098	21,904	11,284	12,584	69,257	62,367	3,184	1,821	1,884
1965	301,780	237,631	28,395	13,031	22,724	96,593	87,407	3,592	2,333	3,261
1966	321,756	247,200	35,161	24,917	106,376	95,870	4,284	2,561	3,661	3,661
1967	336,371	263,621	41,331	18,847	26,572	114,579	103,475	4,861	2,447	3,796
1968	344,308	263,809	40,320	14,635	25,634	120,339	109,165	5,007	2,494	3,673

Source: Dept. of the Army, Corps of Engineers; through 1950, *Annual Report of the Chief of Engineers*, Part 2; thereafter, *Waterborne Commerce of the United States*.

## No. 896. TRAFFIC THROUGH THE PANAMA CANAL, 1940 TO 1969, AND BY NATIONALITY OF VESSEL, 1969

[For years ending June 30. See also *Historical Statistics, Colonial Times to 1957*, series Q 235-287]

YEAR	ALL TRAFFIC		COMMERCIAL OCEAN TRAFFIC <sup>1</sup>								
	Transits	Cargo (1,000 long tons)	Transits	Net tons <sup>2</sup> (1,000)	Tolls (\$1,000)	Cargo (1,000 long tons)	Nationality of Vessel	1969			
								Transits	Net tons <sup>2</sup> (1,000)	Tolls (\$1,000)	Cargo (1,000 long tons)
1940	(NA)	(NA)	5,370	24,144	21,145	27,290	Germany <sup>3</sup>	1,162	5,987	5,227	4,376
1945	(NA)	(NA)	1,939	8,381	7,244	8,604	Great Britain	1,476	12,007	10,533	11,913
1950	5,891	30,302	5,448	28,013	24,430	28,872	Greece	564	5,209	4,525	6,436
1955	8,293	41,485	7,997	38,568	33,840	40,646	Japan	1,072	8,515	7,515	9,230
1960	12,147	60,402	10,795	58,302	50,939	59,258	Liberia	1,569	18,584	15,911	24,348
1964	12,945	72,169	11,808	69,633	61,008	70,550	Netherlands	470	2,900	2,522	2,568
1965	12,918	78,923	11,884	74,735	65,443	76,573	Norway	1,325	12,377	10,869	14,226
1966	18,304	85,323	11,925	78,913	69,095	81,704	Panama	661	3,115	2,593	3,055
1967	14,070	92,998	12,412	88,266	76,879	86,193	Sweden	487	3,433	3,025	3,150
1968	15,511	105,538	13,199	96,488	83,907	96,550	United States	1,510	12,284	10,464	7,730
1969	15,327	108,703	13,150	100,603	87,458	101,391	All other	2,808	16,192	14,274	14,359

NA. Not available.

<sup>1</sup> Comprises ocean-going tolls-paying vessels and foreign naval vessels of 300 net tons and over (Panama Canal measurement) for vessels rated on net tonnage, or 500 tons displacement and over for vessels rated on displacement tonnage.

<sup>2</sup> Panama Canal net. <sup>3</sup> Federal Republic only. <sup>4</sup> Includes Canadian.

Source: Panama Canal Company, Balboa Heights, Canal Zone; *Annual Report*.

## No. 897. EMPLOYEES IN GOVERNMENT AND PRIVATE SHIPYARDS: 1940 TO 1969

[In thousands. Prior to 1959, excludes Alaska and Hawaii. Annual average employment in establishments primarily engaged in building and repairing all types of ships, barges, canal boats, and lighters of 5 gross tons and over, whether propelled by sail or motor power or towed by other craft]

YEAR	Total	Private yards <sup>1</sup>	Navy yards <sup>1</sup>	YEAR	Total	Private yards <sup>1</sup>	Navy yards <sup>1</sup>
1940	180	103	78	1962	212	115	98
1945	1,010	718	292	1963	209	116	94
1950	146	72	74	1964	204	117	87
1955	208	101	107	1965	213	129	84
1958	220	125	95	1966	220	144	85
1959	214	118	97	1967	235	141	95
1960	208	112	96	1968	239	144	95
1961	214	116	98	1969	234	143	91

<sup>1</sup> Includes all full- and part-time employees who worked during or received pay for any part of the pay period which includes the 12th of the month. Data have been adjusted to March 1967 benchmark levels indicated by data from government social insurance programs.

<sup>2</sup> Includes Curtis Bay Coast Guard yard (Md.) through 1958.

Source: Dept. of Labor, Bureau of Labor Statistics. Current data for private yards published monthly in *Employment and Earnings*.

## Transportation—Air and Water

## No. 898. VESSELS ENTERED AND CLEARED IN FOREIGN TRADE—NET REGISTERED TONNAGE, BY CUSTOMS DISTRICTS: 1955 TO 1968

[In thousands of net tons. Excludes domestic trade]

CUSTOMS DISTRICT	1955	1960	1963	1964	1965	1966	1967	1968
ENTERED								
North Atlantic Coast.....	71,150	75,829	83,564	85,178	88,586	89,918	89,171	91,157
With cargo.....	57,844	60,589	70,101	72,875	76,541	79,052	76,685	70,305
South Atlantic Coast.....	6,000	8,827	9,963	11,224	10,862	12,629	13,758	22,515
With cargo.....	5,292	7,808	8,465	9,038	8,709	10,390	11,015	17,917
Gulf Coast.....	17,434	27,022	32,459	36,674	37,564	36,527	34,568	34,468
With cargo.....	11,795	15,616	16,399	17,340	18,485	20,267	19,499	20,914
South Pacific Coast.....	9,582	17,148	17,738	19,206	21,546	23,174	23,658	24,452
With cargo.....	7,547	15,007	15,369	16,500	17,747	18,175	18,105	19,064
North Pacific Coast.....	6,385	10,133	11,570	11,692	12,968	14,711	17,941	20,203
With cargo.....	4,305	7,551	7,729	7,742	7,895	8,378	8,936	10,055
Great Lakes.....	14,597	16,937	21,577	24,705	25,276	26,209	24,810	26,186
With cargo.....	4,631	7,771	10,748	13,948	14,484	15,826	15,555	16,849
Alaska, Hawaii, Puerto Rico, and V.I.....	3,247	6,869	9,842	10,650	12,198	14,727	16,775	10,868
With cargo.....	2,678	5,968	7,991	8,763	9,652	11,500	12,388	7,970
CLEARED								
North Atlantic Coast.....	71,240	80,842	86,874	91,464	80,676	80,865	84,884	87,430
With cargo.....	38,903	35,510	40,296	39,781	37,778	38,387	36,648	35,833
South Atlantic Coast.....	5,846	8,612	9,726	10,908	11,227	11,500	13,084	21,363
With cargo.....	3,635	5,121	5,249	5,766	5,322	6,614	7,714	10,013
Gulf Coast.....	17,289	23,218	30,200	33,959	36,289	40,943	40,666	41,001
With cargo.....	13,320	18,826	23,501	28,192	28,081	33,828	34,189	34,411
South Pacific Coast.....	11,172	18,007	18,263	19,744	21,758	22,076	23,797	24,230
With cargo.....	10,598	14,602	14,546	14,495	16,068	18,020	19,519	19,560
North Pacific Coast.....	5,060	9,444	11,158	10,873	12,840	14,708	17,735	20,422
With cargo.....	4,130	6,923	8,639	8,068	9,769	11,228	14,603	16,763
Great Lakes.....	14,561	16,937	21,434	24,626	25,196	26,004	24,389	26,244
With cargo.....	11,831	13,106	16,730	17,454	18,641	18,702	16,277	17,610
Alaska, Hawaii, Puerto Rico, and V.I.....	4,200	7,654	9,882	10,703	11,749	13,651	15,655	9,031
With cargo.....	3,077	3,491	4,591	4,921	5,555	6,872	6,924	4,350

## No. 899. VESSELS ENTERED AND CLEARED IN FOREIGN TRADE—NET REGISTERED TONNAGE, BY FLAG OF CARRIER VESSEL: 1941 TO 1968

[In thousands of net tons, except as indicated. Includes Puerto Rico and Virgin Islands. Excludes domestic trade. See also *Historical Statistics, Colonial Times to 1957*, series Q 192-203]

YEARLY AVERAGE OR YEAR	ALL PORTS				SEAPORTS <sup>1</sup>				
	Number of vessels	All vessels			All vessels		With cargo		
		Total tonnage	U.S.	Foreign	Percent U.S.	Total tonnage	U.S.	Foreign	Total tonnage
ENTERED									
1941-1945	38,097	67,904	34,658	33,336	51.0	52,620	30,059	22,563	28,995
1946-1950	48,813	87,462	46,205	41,257	52.8	75,094	42,168	32,926	50,288
1951-1955	48,082	114,900	30,450	75,531	34.3	100,057	35,345	65,313	78,407
1956-1960	51,874	155,308	31,113	124,251	20.0	139,375	26,038	112,436	110,023
1961-1965	49,070	187,982	33,443	154,530	17.9	166,207	29,047	136,260	127,832
1955	48,415	128,408	34,321	94,084	26.7	113,807	30,407	83,400	89,552
1960	51,375	162,765	30,180	139,575	18.5	145,828	26,708	111,119	118,530
1964	50,908	198,330	34,956	164,373	17.5	174,625	30,909	143,715	132,257
1965	61,357	209,000	34,041	174,960	16.3	183,724	30,919	152,806	139,029
1966	52,182	217,894	31,487	186,407	14.5	101,684	28,621	163,063	147,769
1967	54,040	220,681	30,830	189,848	14.0	195,871	26,990	168,878	147,058
1968	65,138	229,850	30,389	199,465	18.2	203,664	27,456	176,210	47,771
CLEARED									
1941-1945	38,195	71,792	37,283	34,509	51.9	56,304	32,585	23,718	45,147
1946-1950	45,135	87,190	44,042	42,244	51.5	74,889	40,938	33,953	54,584
1951-1955	45,324	115,447	30,535	75,914	34.2	101,213	35,531	65,682	68,390
1956-1960	49,070	150,370	31,157	126,210	19.9	140,498	27,018	113,478	85,273
1961-1965	48,098	189,274	33,913	155,360	17.9	187,581	30,459	137,121	95,963
1955	46,642	129,368	34,407	94,961	26.8	114,800	30,615	84,192	73,663
1960	49,800	160,715	31,280	135,434	18.8	149,778	27,649	122,127	84,470
1964	49,636	202,282	35,337	166,924	17.5	177,636	31,409	146,225	101,212
1965	49,779	208,736	34,016	174,721	16.3	183,540	31,048	152,492	103,473
1966	51,159	210,437	32,738	186,699	14.9	193,463	29,925	163,507	114,949
1967	52,644	220,231	30,827	189,404	14.0	195,845	27,080	168,766	119,797
1968	54,406	230,324	31,198	199,126	13.5	204,086	28,244	175,830	121,535

<sup>1</sup> Comprises all ports except Great Lakes ports.Source of tables 898 and 899: Dept. of Commerce, Bureau of the Census; *Foreign Commerce and Navigation of the United States*, and annual report, FT 975, *Vessel Entrances and Clearances*.

# Employment—Merchant Marine

575

## No. 900. EMPLOYMENT ON U.S. FLAG MERCHANT VESSELS, 1950 TO 1969, AND BASIC WAGE SCALE FOR ABLE-BODIED SEAMEN, 1956 TO 1970

[Employment data as of June 30, except as indicated]

YEAR	Employ- ment <sup>1</sup>	YEAR AND MONTH	Employ- ment <sup>1</sup>	YEAR AND MONTH	Monthly wage rate <sup>4</sup>	YEAR AND MONTH	Monthly wage rate <sup>4</sup>
1950	56,620	1962	47,346	EAST COAST <sup>5</sup>		WEST COAST <sup>5</sup>	
1955	57,468	1963	47,996	1955—June	\$333.27	1956—October	\$453.00
		1964	47,079	1957—June	353.27	1957—October	478.00
1956	57,192			1960—January	369.17	1960—October	511.50
1957	61,059	1965	330,125				
1958	61,615	1966	51,889				
		1967	54,584	1961—June	383.94	1961—October	521.50
1959	50,223	1968	64,150	1962—June	392.68	1966—June	558.00
1960	49,163			1967—June	422.68	1967—June	577.50
1961	230,930	1969, June 30	47,464	1968—June	443.71	1968—June	599.50
				1970—January	470.33	1970—January	652.00

<sup>1</sup> Estimates of personnel employed on U.S. merchant ships, 1,000 gross tons and over. Excludes vessels on inland waterways, Great Lakes, and those owned by, or operated for, the U.S. Army and Navy, and special types such as cable ships, tugs, etc.

<sup>2</sup> Employment affected by maritime strike, Atlantic, Gulf, and Pacific Coast ports.

<sup>3</sup> Decrease due to sealingar strike.

<sup>4</sup> Represents basic wage, over and above subsistence (board and room), paid to seamen having qualifying experience and employed on U.S. flag merchant vessels. Excludes overtime and fringe pay benefits.

<sup>5</sup> Seamen on both coasts receive extra pay for Saturdays and Sundays at sea. Beginning November 1955, West Coast incorporated this extra pay into base wages but East Coast did not.

Source: Dept. of Commerce, Maritime Administration; *Seafaring Wage Rates*, and unpublished data. Beginning 1956, monthly employment data in *Maritime Manpower Report*.

## No. 901. U.S. MERCHANT MARINE—SUMMARY: 1930 TO 1965

[As of June 30 through 1940; January 1, thereafter. Includes Puerto Rico, Guam, and Virgin Islands. Covers documented vessels of 5 net tons or more. See also *Historical Statistics, Colonial Times to 1967*, series Q 153-174]

YEAR	NUMBER OF VESSELS			GROSS TONNAGE OF VESSELS (1,000)						
	Total	Steam and motor	All other	Total	Major class			Material of which built		Type of trade in which engaged <sup>4</sup>
					Steam and motor	Sail- ing <sup>1</sup>	Un- rigged <sup>2</sup>	Wood	Other <sup>3</sup>	
1930	25,214	18,211	7,003	16,068	13,757	757	1,554	2,554	13,514	6,206
1935	24,010	18,495	6,424	14,654	12,535	441	1,677	2,185	12,469	4,560
1940	27,212	19,504	7,708	14,018	11,358	200	2,466	2,329	11,393	3,638
1945	29,797	22,772	7,025	32,813	30,247	115	2,452	1,915	30,898	26,043
1950	86,083	28,793	7,290	31,215	28,327	82	2,806	1,952	29,263	19,154
1955	89,242	31,882	7,380	29,958	26,792	40	3,125	1,622	28,336	18,143
1958	41,276	32,988	8,288	28,588	24,599	23	3,965	1,469	27,118	16,206
1959	42,409	33,506	8,903	28,895	24,333	23	4,530	1,425	27,470	15,600
1960	43,088	33,640	9,448	28,581	23,553	23	5,005	1,307	27,184	14,737
1961	43,367	33,796	9,571	26,403	21,175	18	5,210	1,375	26,028	13,126
1962	43,666	33,882	9,714	25,456	20,076	18	5,302	1,349	24,107	12,393
1963	44,077	34,004	10,073	25,601	20,709	18	5,595	1,314	24,377	12,289
1964	44,869	34,187	10,587	26,160	20,018	17	6,125	1,260	24,900	12,580
1965 <sup>5</sup>	45,579	34,361	11,218	26,516	19,730	8	6,778	1,198	25,318	12,628

AREA OF LOCATION	NUMBER OF VESSELS					GROSS TONNAGE OF VESSELS (1,000)				
	1950	1955	1960	1964	1965	1950	1955	1960	1964	1965
Total	36,083	39,242	43,088	44,669	45,579	31,215	29,958	28,581	26,160	26,516
Atlantic and Gulf	21,623	23,355	24,963	25,651	26,087	20,420	20,402	18,926	17,077	17,074
Pacific	10,066	10,687	10,828	10,984	10,957	8,446	7,004	5,782	4,405	4,356
Northern Lakes	2,026	2,005	1,950	1,973	1,951	1,628	1,590	1,728	1,858	1,878
Western rivers	2,368	3,195	5,347	6,111	6,584	721	962	2,145	2,820	3,208

<sup>1</sup> Vessels propelled wholly by sail. <sup>2</sup> Vessels having no propelling power of their own.

<sup>3</sup> Comprises iron, steel, composite, concrete, and aluminum. Beginning 1961, includes plastic (fiberglass). For 1963, 1964, and 1965, steel amounted to 24,336,000, 24,860,000, and 25,279,000 tons, respectively.

<sup>4</sup> Excludes vessels engaged in whale, cod, and mackerel fisheries.

<sup>5</sup> Estimates for 1967 and 1968, respectively: Commercial documented vessels, 48,700 and 49,545; gross tonnage, 27,250,946 and 27,341,752.

Source: Dept. of Transportation, U.S. Coast Guard; annual report, *Merchant Marine Statistics*.

## Transportation—Air and Water

No. 902. UNITED STATES FLAG MERCHANT VESSELS, STEAM AND MOTOR: 1940 TO 1969

[Dead-weight tonnage in thousands. As of June 30, except as indicated. Covers ocean-going vessels of 1,000 gross tons and over engaged in foreign and domestic trade, and inactive vessels. Excludes special types and vessels employed on Great Lakes]

YEAR AND TYPE OF VESSEL	ACTIVE VESSELS										TEMPORARILY INACTIVE				RESERVE FLEET			SUPPLY SERVICE	
	ALL VESSELS					Foreign trade					Domestic trade								
	Total	Tons	Number	Tons	Number	Total	Tons	Number	Tons	Number	Coastwise	Intercoastal	Noncontiguous	Number	Tons	Number	Tons	Number	
1940	11,019	1,118	9,643	425	3,749	693	5,893	500	4,172	122	1,188	71	1,357	181	532	181	1,357	1	10
Combination	140	873	112	686	46	514	182	36	129	1	88	71	1,176	—	—	—	—	—	—
Cargo	790	6	120	641	4,882	291	4,443	350	2,438	188	988	109	1,033	417	148	1,120	1,120	1	10
Tanker	370	4	126	365	4,065	68	791	297	3,273	276	3,054	12	148	70	5	62	62	—	—
1946 (Sept. 30)	50	263	2,392	25,339	1,890	20,592	442	4,807	297	3,480	54	563	10	533	157	1,557	16,188	430	3,728
Combination	117	800	25	165	15	127	10	38	—	—	561	—	—	10	175	33	233	31	247
Cargo	3,829	35	183	11,100	1,675	11,000	226	1,910	101	728	53	561	72	450	1,188	1,188	11,068	3,867	3,288
Tanker	906	12	785	1,474	7	122	268	4,264	206	2,858	196	2,751	1	2	9	101	55	624	183
1950	3,408	36	526	1,145	13,828	711	8,353	434	5,474	279	3,716	87	1,131	68	626	86	845	2,177	21,853
Combination	83	639	51	505	45	389	6	355	—	—	559	58	640	6	500	42	384	27	195
Cargo	2,846	28	927	632	7,075	505	5,927	177	1,708	66	3,157	29	3,157	9	988	40	924	27	21,488
Tanker	2,479	6	959	412	6,335	161	5,367	251	3,737	213	3,157	29	3,157	9	988	40	924	27	190
1955	3,235	35	917	1,026	12,872	601	9,992	425	5,880	271	3,999	75	996	79	885	89	1,099	1,983	19,687
Combination	249	1	687	40	371	90	3,361	1	10	—	—	—	1	10	14	68	185	1,166	1,360
Cargo	2,560	26	539	632	7,033	492	5,383	160	1,650	43	385	52	591	65	674	28	288	1,070	1,149
Tanker	2,426	6	790	334	5,488	70	1,248	264	4,220	228	3,614	23	405	13	201	47	742	38	451
1960	2,960	32	821	930	12,467	558	6,541	372	5,926	237	4,284	50	717	85	925	99	1,400	1,884	18,279
Combination	1	2,306	32	044	36	319	34	305	2	14	—	—	2	14	4	31	31	265	1,686
Cargo	2,226	23	015	637	6,854	479	5,265	148	1,589	35	375	39	442	74	773	35	376	1,536	2,555
Tanker	2,428	7	762	267	5,285	45	4,972	222	4,323	202	3,910	11	3,910	9	138	60	993	83	1,082
1969	2,013	25	079	646	10,683	447	6,021	199	4,062	105	2,619	25	416	69	1,029	122	2,124	878	7,774
Combination	1	187	1	214	22	188	20	187	2	11	—	—	2	11	4	29	101	1,011	5,097
Cargo	1,521	16	462	467	5,923	388	5,100	69	823	8	111	17	227	44	486	51	573	690	6,477
Tanker	1,306	7	403	157	3,902	29	3,228	97	2,808	8	189	23	532	67	532	67	532	67	1,608

— Represents zero.

<sup>1</sup> Includes ships originally constructed as cargo ships but converted to transports, hospital ships, etc., previously included in cargo classification as follows: 1955, 181 ships of 1,124,000 tons; 1960, 237 ships of 1,427,800 tons; 1968, 160 ships of 977,000 tons.

Source: Dept. of Commerce, Maritime Administration; Employment Report of United States Flag Merchant Fleet Oceangoing Vessels 1,000 Gross Tons and Over, June 1969.

# Merchant Vessels

577

**No. 903. MERCHANT VESSELS COMPLETED BY U.S. SHIPYARDS: 1930 TO 1969**  
 [Tons in thousands. Represents self-propelled steel vessels of 2,000 gross tons and over. Excludes Alaska and Hawaii]

YEAR	ALL MERCHANT VESSELS		PASSENGER-CARGO/TRANSPORT			CARGO			TANKER		
	Number	Gross tons	Number	Gross tons	Dead-weight tons	Number	Gross tons	Dead-weight tons	Number	Gross tons	Dead-weight tons
1930	18	164	5	50	39	2	16	24	11	97	161
1935	2	19	-	-	-	-	-	-	2	19	30
1940	53	445	6	69	61	31	227	335	16	140	238
1944	1,463	11,403	48	461	330	1,175	8,455	11,888	240	2,486	3,955
1945	1,041	7,615	46	509	311	807	5,336	7,206	188	1,770	2,787
1950	26	405	-	-	-	3	27	44	23	378	609
1955	9	119	-	-	-	7	84	95	2	35	55
1960	26	410	-	-	-	15	134	163	11	276	456
1962	27	392	1	14	10	23	265	303	3	113	186
1963	35	418	6	51	31	23	250	289	6	117	200
1964	15	213	1	14	9	10	104	123	4	65	166
1965	13	178	-	-	-	11	121	154	2	52	92
1966	13	146	-	-	-	12	125	161	1	21	36
1967	12	143	-	-	-	12	143	150	-	-	-
1968	21	319	-	-	-	18	256	291	3	63	113
1969	22	418	-	-	-	14	217	247	8	201	381

- Represents zero.

Source: 1930-1964, American Bureau of Shipping, New York, N.Y., annually in *The Bulletin*, Beginning 1965, Dept. of Commerce, Maritime Administration; annual report, *New Ship Construction*.

## No. 904. SHIPBUILDING IN PRIVATE SHIPYARDS—SUMMARY: 1950 TO 1969

[Tons in thousands: Gross tons for commercial vessels, light displacement tons for naval vessels. Covers steel vessels of 1,000 tons or over]

ITEM	1950		1960		1965		1968		1969	
	Number	Tons	Number	Tons	Number	Tons	Number	Tons	Number	Tons
<b>COMMERCIAL VESSELS</b>										
Under construction, Jan. 1	39	636	60	979	47	550	64	1,211	63	1,495
Contracted for	16	181	23	270	16	166	23	613	8	309
Launched	26	422	31	471	17	221	27	454	13	271
Delivered	26	415	25	404	18	203	24	320	22	416
Under construction, Dec. 31	29	401	58	844	45	513	63	1,495	49	1,388
<b>NAVAL VESSELS</b>										
Under construction, Jan. 1	11	42	52	334	101	537	134	686	133	701
Contracted for	-	-	19	115	23	158	15	153	6	80
Launched	-	-	16	170	15	102	26	138	28	142
Delivered	-	-	12	39	18	122	16	138	31	150
Under construction, Dec. 31	11	42	59	410	106	573	133	701	108	621

- Represents zero. <sup>1</sup> Adjusted to account for major changes made during construction.

Source: Shipbuilders Council of America, Washington, D.C.; *Annual Report*, and unpublished data.

## No. 905. VESSELS REPAIRED OR CONVERTED IN PRIVATE SHIPBUILDING AND SHIP REPAIR YARDS: 1950 TO 1969

YEAR	TOTAL		VESSELS UNDER 1,000 GROSS TONS		VESSELS OVER 1,000 GROSS TONS	
	Yards reporting <sup>1</sup>	Vessels	Yards reporting	Vessels	Yards reporting	Vessels
1950	118	33,287	111	17,993	80	15,294
1955	144	35,413	130	21,122	89	14,291
1960	159	37,774	132	24,991	93	12,783
1964	146	37,500	132	26,777	93	10,723
1965	136	35,600	117	22,900	93	12,700
1966	135	33,100	110	19,600	75	13,500
1967	130	37,400	112	24,500	85	12,900
1968	128	37,200	114	24,300	81	12,900
1969	126	36,000	116	22,120	78	13,880

<sup>1</sup> Not additive.

Source: Shipbuilders Council of America, Washington, D.C.; *Annual Report*, and unpublished data.

## Transportation—Air and Water

No. 906. MERCHANT VESSELS LAUNCHED AND OWNED—WORLD AND UNITED STATES:  
1940 TO 1969

[Vessels of 100 gross tons and over. Beginning 1945, excludes sailing ships, nonpropelled craft, and all ships built of wood]

YEAR	WORLD				UNITED STATES			
	Launched		Owned		Launched		Owned	
	Number	Gross tons (1,000)	Number	Gross tons (1,000)	Number	Gross tons (1,000)	Number	Gross tons (1,000)
1940	495	1,754	(1)	(1)	167	579	(1)	(1)
1945	1,311	7,180	(1)	(1)	880	5,968	(1)	(1)
1950	990	3,489	27,022	83,996	51	437	4,531	27,404
1955	1,437	5,315	29,967	100,069	26	73	4,225	20,343
1960	2,020	8,356	34,056	129,339	60	485	3,845	24,781
1965	2,286	12,216	30,028	159,979	130	270	3,224	21,473
1967	2,778	15,780	42,234	181,709	231	242	3,115	20,286
1968	2,708	16,908	46,343	193,770	199	441	3,049	19,023
1969	2,819	19,315	48,246	211,294	174	400	2,972	19,507

<sup>1</sup> Not recorded.Source: Lloyd's Register of Shipping, London, England; *Register Book Statistical Tables and Annual Summary of Merchant Ships Launched in the World*.

## No. 907. MERCHANT FLEETS OF THE WORLD, BY TYPE OF VESSEL AND COUNTRY OF REGISTRATION: 1968

[Vessels of 1,000 gross tons and over. As of December 31. Specified countries have 100 or more ships]

COUNTRY OF REGISTRY	TOTAL		COMBINATION PASSENGER AND CARGO		FREIGHTERS		BULK CARRIERS <sup>1</sup>		TANKERS	
	Number	Average age (years)	Number	Average age (years)	Number	Average age (years)	Number	Average age (years)	Number	Average age (years)
			989	20	11,868	15	2,609	9	3,895	11
World total	19,361	13	989	20	11,868	15	2,609	9	3,895	11
United States	2,071	22	105	23	1,511	22	53	23	312	19
Privately owned	987	19	25	16	615	19	50	23	277	18
Government-owned	1,104	24	170	24	896	24	3	24	35	25
Foreign	17,290	12	794	20	10,357	14	2,556	8	3,583	10
Argentina	141	22	15	21	70	23	6	22	50	22
Australia	102	14	4	11	40	15	45	14	18	9
Brazil	227	19	12	34	147	21	21	13	47	11
British Colonies <sup>2</sup>	134	15	10	28	85	17	23	8	16	8
China (Taiwan)	135	17	4	27	115	17	7	15	9	10
China (mainland)	204	22	22	25	143	23	19	17	20	17
Cyprus	112	22	6	32	85	22	11	21	10	16
Denmark	332	8	17	20	231	9	27	3	57	6
Finland	205	13	7	32	144	12	18	13	33	13
France	485	11	30	15	252	12	62	7	141	10
Germany (East)	119	8	4	15	94	8	10	8	11	11
Germany, Fed. Rep. of	909	10	7	14	769	10	80	8	53	8
Greece	1,006	18	49	25	704	20	102	9	151	14
India	230	11	14	16	176	12	80	3	10	9
Indonesia	156	14	30	18	96	15	7	2	23	10
Italy	620	17	72	20	270	21	117	10	161	14
Japan	1,766	7	27	12	1,096	8	339	5	304	6
Liberia	1,613	12	18	19	475	17	471	9	649	11
Netherlands	483	10	25	18	311	19	34	7	93	10
Norway	1,308	8	31	14	526	11	337	5	414	7
Panama	623	22	26	28	381	25	57	20	159	14
Philippines	161	17	16	10	122	19	8	15	15	14
Poland	204	12	2	24	162	12	34	11	6	14
Spain	376	18	39	23	219	21	23	16	95	11
Sweden	408	9	6	17	234	10	34	7	74	6
United Kingdom	1,840	11	87	17	1,036	11	203	9	424	9
U.S.S.R.	1,634	10	75	18	1,103	10	134	11	822	8
Yugoslavia	188	11	15	16	136	12	18	3	19	7
All others <sup>3</sup>	1,589	15	124	22	1,135	15	131	12	199	12

<sup>1</sup> Includes ore carriers and ore/oil carriers.<sup>2</sup> Comprises Bahama Islands, Bermuda, Cayman Island, Gibraltar, and Hong Kong.<sup>3</sup> Includes countries with less than 100 merchant type ships of 1,000 gross tons and over.Source: Dept. of Commerce, Maritime Administration; biennial report, *A Statistical Analysis of the World's Merchant Fleets*, December 1968.

## Section 23

### Agriculture

This section presents statistics concerning the structure of our agricultural economy. Included are data on farms and farm population; land utilization and conservation; farm income, expenditures, and debt; farmer cooperatives; farm output and marketings; trade in agricultural products; and data on specific crops, livestock, poultry, and livestock and poultry products.

The principal sources of these data are reports issued by the Bureau of the Census, which conducts a census of agriculture every 5 years and censuses of irrigation and of drainage every 10 years; and three annual reports, *Agricultural Statistics*, *Crop Production*, and *Crop Values*, issued by the Statistical Reporting Service, Department of Agriculture. Other important sources include *The Balance Sheet of Agriculture*, *Changes in Farm Production and Efficiency*, *The Farm Income Situation*, and other *Situation* reports, issued by the Economic Research Service, Department of Agriculture. Sources of current data on agricultural exports and imports include *Foreign Agricultural Trade*, also published by the Economic Research Service, and the reports of the Bureau of the Census, particularly Report FT 135, *U.S. Imports, General and Consumption, Schedule A Commodity and Country*, and Report FT 410, *U.S. Exports, Schedule B Commodity and Country*.

A census of agriculture has been taken by personal enumeration of individual farms every 10 years since 1840 and every 5 years since 1920. The first census included such items as numbers of livestock, production of wool, value of poultry and dairy products, and production of principal crops. Data on number, acreage, and value of farms were first obtained in the 1850 census; on farm tenure, in 1880; and on a detailed classification of farmland by use, in 1925. The 1964 Census of Agriculture is the most recent one for which complete data are available. Publication of the 1969 census results is scheduled to begin in early 1971.

Annual agricultural statistics of a wide variety have been issued by the Department of Agriculture for over 100 years. The 44 field offices of the Statistical Reporting Service collect data from voluntary reporters. State estimates and other information are sent to the Crop Reporting Board of the Statistical Reporting Service, which issues reports containing State, regional, and national data.

Statistics compiled by the Statistical Reporting Service on crops, livestock and livestock products, agricultural prices, farm employment, and other related subjects are based mainly on data obtained through mail questionnaires. The basic information is obtained from nearly three-fourths of a million reporters, mostly farmers, who report for their own and nearby farms on some 80 crops and scores of other items pertaining to agricultural production and farm family living.

**Farms and farmland.**—In the course of its history, the Bureau of the Census has used varying definitions of a farm. In the 1959 and 1964 censuses, places of less than 10 acres were counted as farms if estimated sales of agricultural products for the year amounted to at least \$250, and places of 10 or more acres if such sales amounted to at least \$50. In the 1950 and 1954 censuses, places of 3 or more acres were counted as farms if the annual value of agricultural products, whether for home use or for sale, but exclusive of home-garden products, amounted to \$150 or more; places of less than 3 acres were counted as farms only if the annual sales amounted to \$150 or more. For definitions used in earlier censuses, see *U.S. Census of Agriculture: 1964*, Vol. II, Introduction.

Estimates based on evaluation studies of the 1959 and 1964 census results indicate an underenumeration of 341 thousand farms in 1959, 8.4 percent of the estimated total number, and of 401 thousand farms, or 11.3 percent, in 1964. In both censuses, the estimated underenumeration of land in farms amounted to 71.5 million acres, or 6 percent of the estimated total acreage. Except as noted, data from those censuses have not been adjusted for the estimated underenumeration. Additional details are given in *U.S. Census of Agriculture: 1959, and 1964; Vol. II, Introduction*.

Currently included as farms are such agricultural enterprises as nurseries, greenhouses, hothouses, mushroom houses, and cranberry bogs; excluded are fish farms, fish hatcheries, oyster farms, frog farms, fur farms, apiaries, kennels, game preserves, parks, and the like. In the case of landowners who had one or more tenants, renters, croppers, or managers, the land operated by each was counted as a separate farm.

In the 1964 census, farms classified as commercial were generally those with sales of \$2,500 or more, and also those with sales of \$50 to \$2,499 provided the operator was under 65 years of age and did not work off the farm 100 or more days during the year.

Farmland refers to all land under the control of a farm operator and considered as part of his farm, including land not actually under cultivation or used for pasture or grazing. Rent-free land was included as part of the farm only if the operator had sole use of it. Land used for pasture or grazing that was neither owned nor leased by the farm operator, such as national forests, Taylor grazing land, State or other public lands, and some railroad and other privately owned lands, is not included.

**Irrigation and drainage.**—Irrigated land as defined by the Bureau of the Census is the net acreage of farmland to which irrigation water was applied during the census year. It excludes land not irrigated during the year and also irrigated nonfarm land. In the 18 Western States (Alaska excluded) and Louisiana, the Bureau of the Census collects information on irrigation at 10-year intervals from irrigation companies, districts, and other organizations, and from farms that operate their own irrigation works. Irrigation information for other States is generally limited to the regular farm census. In the 1950 and 1960 drainage censuses, the Bureau of the Census enumerated, in general, only organized enterprises with 500 acres or more of drained farmland.

**Soil conservation.**—Soil conservation district legislation has been enacted in all 50 States, Puerto Rico, and the Virgin Islands. Soil conservation districts have broad responsibility and authority for conservation and development of soil, water, and related resources. In most cases, districts have authority to accept Federal, State, county, and private assistance for their soil and water conservation programs.

**Farm income.**—Cash income is the cash receipts from farm marketings and Government payments made directly to farmers for farm related activities. Farm marketings represent quantities of agricultural products sold by farmers multiplied by prices received per unit of production at the local market. Gross farm income includes cash income, value of farm products consumed in farm homes, and rental value of farm homes.

Information on prices received is obtained by the Statistical Reporting Service of the Department of Agriculture from about 33,000 voluntary reporters, including farmers, local merchants, and handlers of agricultural products. Season average prices received by farmers are calculated by weighting midmonth prices by monthly sales during the crop marketing season, beginning with the first month in which a particular crop harvest begins.

**Crop reporting.**—Estimates by the Department of Agriculture's Statistical Reporting Service of crop acreage and production for the census years are set up currently from available information and, if necessary, are later revised to a level based largely

on the census enumerations. Estimates for intercensal years are based on sample data obtained each year from individual reporters, supplemented by such data as State assessors' enumerations of agricultural information, reports of carlot shipments, warehouse receipts, local surveys, personal observations by field statisticians, and reports from other sources. Cotton acreage and production are also based on sample data and on ginning information gathered by the Bureau of the Census.

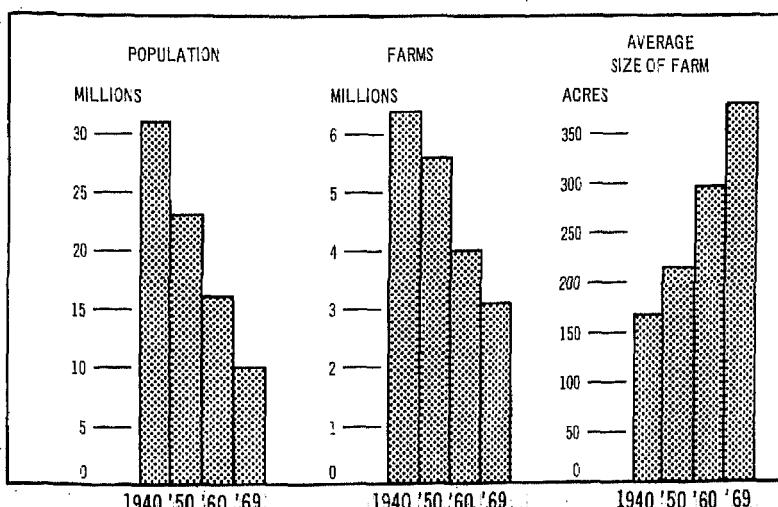
**Livestock.**—Each census of agriculture from 1840 through 1900 was taken as of June 1. The various quinquennial and decennial censuses since then have been taken as of January, April, or the fall, as specified in the published results. Comparison of livestock inventories from census to census is seriously affected by changes in date of enumeration. From January to April, and from October and November to January, material changes occur in numbers on hand in most parts of the country, due to births, marketings, farm slaughter, etc. To obtain as much comparability as possible, the censuses taken in April either excluded recently born animals from the enumeration or provided for their enumeration in a separate age group. Volume II of *U.S. Census of Agriculture: 1964* shows a complete history of the enumeration of livestock and analyzes comparability from census to census.

Annual inventory numbers of livestock on farms and estimates of livestock, dairy, and poultry production prepared by the Department of Agriculture are based on information from farmers, supplemented by State assessors' data and by records of brand inspections, rail and truck shipments, and slaughter. The level for these inventories is based largely on interpretations of quinquennial census enumerations.

**Historical statistics.**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1957*. See preface.

FIG. XXXVIII. FARM POPULATION, FARMS, AND FARM SIZE: 1940 TO 1969

[See tables 908 and 939]



## No. 908. FARM POPULATION AND COMPONENTS OF CHANGE: 1920 TO 1969

[In thousands, except as indicated. Prior to 1950, excludes Alaska and Hawaii. Beginning 1945, figures provide a continuous series approximating the current definition of farm population; see text, p. 2. See *Historical Statistics, Colonial Times to 1957*, series C 74-79, for estimates for 1920 to 1944]

YEAR	Farm population, Apr. 1	NET CHANGE SINCE PRECEDING APRIL		Farm population as percent of total population <sup>2</sup>	YEAR	Farm population, Apr. 1	NET CHANGE SINCE PRECEDING APRIL		Farm population as percent of total population <sup>2</sup>
		Births and deaths	Migration <sup>1</sup>				Births and deaths	Migration <sup>1</sup>	
1920	31,974	(NA)	(NA)	30.1	1955	19,078	268	-210	11.6
1925	31,190	500	-487	27.0	1956	18,712	261	-627	11.2
1930	30,529	498	-477	24.9	1957	17,656	230	-1,295	10.4
1935	32,161	383	-527	25.3	1958	17,128	220	-743	9.9
1940	30,547	410	-703	23.2	1959	16,592	203	-740	0.4
1945	24,420	353	-748	17.5	1960	15,635	184	-1,142	8.7
1946	25,403	312	671	18.0	1961	14,803	168	-1,000	8.1
1947	25,829	470	-44	18.0	1962	14,313	156	-645	7.7
1948	24,383	443	-1,889	16.7	1963	13,307	140	-1,086	7.1
1949	24,104	397	-588	16.3	1964	12,954	121	-533	0.8
1950	23,048	392	-1,537	15.3	1965	12,363	112	-703	0.4
1951	21,890	373	-1,531	14.2	1966	11,595	90	-858	5.9
1952	21,748	341	-483	13.9	1967	10,875	73	-793	5.5
1953	19,874	328	-2,201	12.5	1968	10,454	60	-481	5.2
1954	19,018	296	-1,151	11.8	1969	10,307	51	-198	5.1

NA. Not available.

<sup>1</sup> Beginning 1940, includes inductions and enlistments into Armed Forces, and persons returning from Armed Forces. For all years, includes persons who did not move but who were in and out of the farm population because agricultural operations began or ceased, respectively, on the place where they were living.

<sup>2</sup> Total population includes Armed Forces abroad.

Source: Dept. of Agriculture, Economic Research Service; *Farm Population, Estimates for 1910-62*, and annual report, *Farm Population Estimates*.

## No. 909. FARMS—NUMBER AND ACREAGE: 1920 TO 1970

[Prior to 1959, excludes Alaska and Hawaii. Estimated. For definition of farms and farmland, see text, pp. 570-580. See also *Historical Statistics, Colonial Times to 1957*, series K 1-2]

YEAR	FARMS <sup>1</sup>		LAND IN FARMS		YEAR	FARMS <sup>1</sup>		LAND IN FARMS	
	Number (1,000)	Annual change <sup>2</sup> (1,000)	Total (mil. acres)	Average per farm (acres)		Number (1,000)	Annual change <sup>2</sup> (1,000)	Total (mil. acres)	Average per farm (acres)
1920	6,518	(x)	958	147	1956	4,514	-140	1,197	265
1925	6,471	-9	924	143	1957	4,372	-142	1,191	273
1930	6,546	15	987	151	1958	4,233	-139	1,185	280
1935	6,814	54	1,055	155	1959	4,105	-128	1,183	288
1940	6,360	-93	1,061	167	1960	3,962	-143	1,177	297
1945	5,967	-77	1,142	161	1961	3,821	-141	1,170	306
1947	5,871	-48	1,148	166	1962	3,685	-136	1,161	315
1948	5,803	-68	1,152	169	1963	3,561	-124	1,153	324
1949	5,722	-81	1,155	202	1964	3,442	-119	1,147	333
1950	5,648	-74	1,202	213	1965	3,340	-102	1,142	342
1951	5,428	-220	1,204	222	1966	3,239	-101	1,137	351
1952	5,198	-230	1,205	232	1967	3,146	-93	1,132	360
1953	4,984	-214	1,206	242	1968	3,054	-92	1,128	369
1954	4,708	-186	1,206	251	1969	2,971	-83	1,124	378
1955	4,654	-144	1,202	258	1970 (prel.)	2,895	-76	1,119	387

X. Not applicable.

<sup>1</sup> Census years (indicated by italics) have been adjusted for underenumeration and for changes in definition of a farm; intercensal years are based on trend and on indications of change in acreage and livestock surveys.

<sup>2</sup> Average annual change from preceding year shown.

Source: Dept. of Agriculture, Statistical Reporting Service; *Number of Farms, 1910-1969; Land in Farms, 1950-1959*, By States, 1962 (Statistical Bulletin No. 316), supplemented annually by *Number of Farms and Land in Farms*; and unpublished data.

## No. 910. FARM POPULATION CHARACTERISTICS: 1960 AND 1969

[In thousands, except as indicated. 1960, as of April; 1969, April-centered annual averages]

CHARACTERISTIC	TOTAL		MALE		FEMALE		PERCENT DISTRIBUTION, BOTH SEXES	
	1960	1969	1960	1969	1960	1969	1960	1969
Total	15,669	10,307	8,184	5,303	7,485	5,005	100.0	100.0
White	13,092	9,306	6,871	4,788	6,221	4,518	88.6	90.3
Negro and other	2,577	1,002	1,313	515	1,264	487	16.4	9.7
Under 14 years of age	4,905	2,684	2,580	1,392	2,400	1,302	31.9	26.0
14 years of age and over	10,674	7,623	5,598	3,921	5,076	3,703	68.1	74.0
14-19 years	1,868	1,430	1,011	761	857	669	11.9	13.9
20-24 years	763	503	426	272	337	231	4.9	4.9
25-34 years	1,461	784	731	376	730	408	9.3	7.6
35-44 years	1,803	1,188	881	551	922	587	11.5	11.0
45-64 years	3,453	2,606	1,830	1,336	1,623	1,271	22.0	25.3
65 years and over	1,320	1,162	719	626	607	537	8.5	11.3
In labor force, 14 years of age and over <sup>1</sup>	6,266	4,514	4,743	3,136	1,523	1,879	58.7	59.2
Employed in agriculture	4,025	2,485	3,388	2,017	637	488	64.2	55.1
Self-employed	2,408	1,515	2,313	1,447	92	68	59.8	61.0
Wage and salary	782	403	691	350	91	53	19.4	16.2
Unpaid family workers	838	567	384	220	464	347	20.8	22.8
Employed in nonagricultural industries	2,064	1,958	1,252	1,080	812	878	33.0	43.4
Self-employed	(2)	173	(2)	120	(2)	53	(2)	8.8
Wage and salary	(2)	1,765	(2)	959	(2)	806	(2)	90.1
Unpaid family workers	(2)	21	(2)	2	(2)	19	(2)	1.1
Not in labor force	4,408	3,110	855	785	3,553	2,324	41.3	40.8

<sup>1</sup> Includes unemployed, not shown separately. <sup>2</sup> Comparable figures not available.Source: Dept. of Commerce, Bureau of the Census; *Current Population Reports*, Series P-27.

## No. 911. CHARACTERISTICS OF FARM OPERATORS: 1959 AND 1964

[Number in thousands; income in millions of dollars, except as indicated]

ITEM	1959 <sup>1</sup>		1964		ITEM	1959 <sup>1</sup>		1964	
	Total	Percent	Total	Percent		Total	Percent	Total	Percent
Total	3,708	100.0	3,158	100.0	School years completed:				
Race and residence:					Less than 5	(N/A)	(N/A)	226	7.1
White	3,423	92.3	2,958	93.7	8 (elementary school)	(N/A)	(N/A)	851	26.9
Negro and other	285	7.7	200	6.3	12 (high school)	(N/A)	(N/A)	763	24.2
North	1,715	46.3	1,480	46.9	16 or more (college)	(N/A)	(N/A)	139	4.4
South	1,645	44.4	1,378	43.5	Years on present farm:				
White	1,379	37.2	1,188	37.6	Less than 5	639	17.2	612	19.4
Negro and other	266	7.2	185	5.8	5-9	630	17.0	469	14.9
West	349	9.4	306	9.7	10 or more	2,340	63.1	1,096	60.4
Residing on farm operated	3,236	87.3	2,774	87.8	Not reporting	100	2.7	171	5.4
Not residing on farm operated	267	7.2	291	9.2	Days working off farm:				
Not reporting	207	5.6	93	2.9	Less than 100	556	15.0	449	14.2
Age:					100-199	230	6.2	189	6.0
Under 25 years	62	1.7	53	1.7	200 or more	878	23.7	824	26.1
25-34 years	403	10.9	309	9.8	None or not reporting	2,044	55.1	1,096	53.7
35-44 years	806	21.7	654	20.7	Households reporting				
45-54 years	980	26.4	851	27.0	income <sup>1,2</sup>	(N/A)	(N/A)	2,564	81.2
55-64 years	803	21.6	742	23.5	Total income	(N/A)	(N/A)	10,053	100.0
65 years or more	617	16.6	548	17.4	Wages and salaries	(N/A)	(N/A)	6,451	64.2
Not reporting age	37	1.0	(X)	(X)	Nonfarm business or	(N/A)	(N/A)	1,155	11.5
Average age—years	50.5	(X)	51.3	(X)	profession	(N/A)	(N/A)	842	8.4

<sup>1</sup> NA. Not available. <sup>2</sup> X. Not applicable. <sup>1</sup> Based on sample. <sup>2</sup> From sources other than farm operated.<sup>3</sup> Social security, pensions, and veterans and welfare payments.Source: Dept. of Commerce, Bureau of the Census; *U.S. Census of Agriculture: 1964*, Vol. II.

## No. 912. FARMS—NUMBER, BY SIZE, 1940 TO 1964, AND BY ACREAGE, 1964

[1954 excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1957*, series K 61-72]

SIZE OF FARM	NUMBER OF FARMS (1,000)					1964			
	1940	1950	1954	1959	1964	Land in farms (1,000 acres)	Crop-land harvested (1,000 acres)	Percent distribution	
								Number of farms	All land in farms
Total.....	6,102	5,388	4,782	3,711	3,158	1,110,187	286,892	100.0	100.0
Under 10 acres.....									
10-49 acres.....	500	480	484	244	183	778	360	5.8	0.1
50-99 acres.....	1,782	1,480	1,213	813	637	17,327	6,072	20.2	1.6
100-179 acres.....	1,291	1,048	864	658	542	39,500	13,239	17.2	3.6
180-259 acres.....	1,310	1,108	958	773	633	86,598	34,302	20.1	7.8
260-499 acres.....	486	487	464	414	355	76,834	33,798	11.3	6.9
500-999 acres.....	164	182	192	200	210	144,598	57,211	6.6	13.0
1,000-1,999 acres.....	101	121	130	{ 79	85	115,903	35,303	2.7	10.4
2,000 acres and over.....				57	60	468,854	34,453	1.9	42.2
									12.0

## No. 913. FARMS—NUMBER, ACREAGE, AND VALUE OF SALES, BY ECONOMIC CLASS: 1959 AND 1964

[Based on reports for a sample of farms. For definition of commercial farm, see text, p. 580]

ECONOMIC CLASS OF FARMS (value of farm products sold)	Farms (1,000)	ACREAGE		VALUE OF SALES		PERCENT DISTRIBUTION		
		Total (1,000)	Average per farm	Total (mil. dol.)	Average per farm (dol.)	Farms	Acreage, total	Value of sales, total
1959								
Commercial farms.....	2,416	977,276	405	29,463	12,195	100.0	100.0	100.0
\$50-\$2,499.....	349	37,100	106	461	1,321	14.4	3.8	1.6
\$2,500-\$4,000.....	618	118,546	192	2,275	3,683	25.6	12.1	7.7
\$4,000-\$9,999.....	654	188,531	288	4,728	7,222	27.1	19.3	16.0
\$10,000-\$19,999.....	483	214,907	445	6,705	13,882	20.0	22.0	22.8
\$20,000-\$39,999.....	210	106,444	701	5,648	26,842	8.7	17.0	19.2
\$40,000 or more.....	102	251,748	2,466	9,651	94,531	4.2	25.8	32.8
Other farms 1.....	1,292	146,103	113	1,162	900	100.0	100.0	100.0
1964								
Commercial farms.....	2,166	965,458	446	34,369	15,869	100.0	100.0	100.0
\$50-\$2,499.....	348	42,484	122	364	1,044	16.1	4.4	1.1
\$2,500-\$4,000.....	444	61,640	206	1,611	3,629	20.5	9.5	4.7
\$4,000-\$9,999.....	505	157,921	313	3,653	7,240	23.3	16.4	10.6
\$10,000-\$19,999.....	467	217,356	465	6,614	14,160	21.6	22.5	19.2
\$20,000-\$39,999.....	260	185,726	715	7,114	27,373	12.0	19.2	20.7
\$40,000 or more.....	142	270,430	1,906	15,012	105,786	6.6	28.0	43.7
Other farms 1.....	992	144,728	146	925	932	100.0	100.0	100.0

1 Part-time, part-retirement, and abnormal farms. For definition, see source.

Source of tables 912 and 913: Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1964, Vol. II.

## No. 914. INCOME PER FARM-OPERATOR FAMILY, BY VALUE OF SALES CLASS: 1960, 1965, AND 1969

[Covers only farms with sales of products]

SALES CLASS	1960			1965			1969		
	Total income 1	Realized net income 1	Off-farm income	Total income 1	Realized net income 1	Off-farm income	Total income 1	Realized net income 1	Off-farm income
All farms.....	\$5,102	\$2,962	\$2,140	\$7,941	\$4,190	\$3,751	\$10,693	\$5,437	\$5,256
Less than \$2,500.....	3,581	850	2,731	5,620	974	4,646	8,093	1,082	7,011
\$2,500-\$4,000.....	3,810	1,961	1,849	5,442	1,972	3,470	7,017	2,122	4,835
\$5,000-\$9,999.....	4,878	3,305	1,573	6,752	3,519	3,233	8,118	3,630	4,488
\$10,000-\$19,999.....	6,626	5,368	1,258	8,515	6,199	2,316	9,622	6,481	3,141
\$20,000-\$39,999.....	10,330	8,652	1,078	12,449	9,987	2,512	13,707	10,466	3,241
\$40,000 and over.....	21,132	18,955	2,177	29,920	25,451	4,469	32,967	27,503	5,464

1 Includes Government payments and nonmoney income from farm food and housing.

Source: Dept. of Agriculture, Economic Research Service; *The Farm Income Situation*.

## Farms

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## No. 915. FARMS—NUMBER, ACREAGE, AND VALUE, BY STATES: 1959 AND 1964

(For composition of regions, see fig. I, p. xi)

STATE	NUMBER OF FARMS (1,000)		ALL LAND IN FARMS (1,000 acres)		AVERAGE ACREAGE PER FARM		TOTAL VALUE <sup>1</sup> (mil. dol.)		AVERAGE VALUE PER FARM <sup>1</sup> (\$1,000)		VALUE OF FARM PRODUCTS SOLD (mil. dol.)	
	1959	1964	1959	1964	1959	1964	1959	1964	1959	1964	1959	1964
U.S.	3,711	3,158	1,123,508	1,110,187	303	352	128,005	159,932	35	51	30,493	35,294
North	1,715	1,480	421,440	415,060	246	281	61,761	71,082	36	48	15,294	17,414
South	1,646	1,373	387,448	346,228	217	252	39,011	52,068	24	38	8,884	10,586
West	340	306	344,620	348,890	987	1,142	28,233	36,781	81	120	6,315	7,293
N.E.	56	42	9,315	7,744	164	185	1,414	1,459	25	35	592	717
Maine	17	13	3,082	2,590	178	201	266	287	15	20	171	256
N.H.	7	5	1,124	903	172	194	118	118	18	25	48	49
Vt.	12	9	2,945	2,524	243	273	240	276	20	30	100	115
Mass.	11	8	1,142	902	102	113	384	349	32	43	126	130
R.I.	1	1	138	104	99	94	52	51	38	46	18	19
Conn.	8	6	884	721	107	119	398	409	47	67	120	130
M.A.	197	161	26,731	24,235	135	151	4,879	5,442	25	31	1,699	1,859
N.Y.	82	67	13,490	12,276	184	185	1,971	2,181	24	33	765	853
N.J.	15	11	1,379	1,156	89	109	717	782	46	73	281	216
Pa.	100	83	11,862	10,804	119	130	2,190	2,479	22	30	713	791
E.N.C.	666	574	103,386	99,487	155	173	24,737	27,909	37	49	5,204	6,106
Ohio	140	120	18,507	17,619	132	146	4,673	5,221	33	43	863	1,013
Ind.	128	108	18,613	17,938	145	166	4,983	5,582	38	52	946	1,105
Ill.	155	133	30,327	29,958	106	226	9,580	10,744	62	81	1,811	2,123
Mich.	112	94	14,783	13,599	132	145	2,855	3,182	26	34	623	766
Wis.	131	119	21,156	20,378	161	172	2,796	3,180	21	27	981	1,099
W.N.C.	795	703	282,008	283,603	355	403	30,732	36,272	39	52	7,800	8,734
Minn.	146	131	30,798	30,805	211	235	4,743	5,125	33	39	1,212	1,376
Iowa	175	154	33,831	33,758	194	219	5,587	6,181	49	60	2,284	2,597
Mo.	169	147	33,155	32,602	197	222	3,727	4,926	22	33	1,012	1,053
N. Dak.	55	49	41,466	42,717	755	875	2,141	2,854	39	58	469	570
S. Dak.	55	50	44,851	45,587	805	917	2,277	2,814	41	57	514	629
Nebr.	90	80	47,756	47,703	528	598	4,234	5,232	47	65	1,198	1,334
Kans.	104	92	50,153	50,271	481	544	5,017	6,138	48	66	1,111	1,175
S.A.	592	468	83,341	76,960	141	164	12,832	16,156	22	35	3,247	4,143
Del.	5	4	763	717	146	163	180	235	35	53	86	108
Md.	25	21	3,457	3,181	138	153	1,982	1,349	39	65	281	276
Va.	98	80	13,126	12,002	135	149	1,819	2,215	19	28	424	470
W. Va.	44	35	6,063	5,279	138	153	450	478	10	14	99	92
N.C.	191	148	15,888	14,382	83	97	2,949	3,622	15	24	707	1,068
S.C.	78	56	9,149	8,101	117	144	1,226	1,403	16	25	303	349
Ga.	106	83	19,658	17,887	185	215	1,908	2,431	18	29	607	826
Fla.	45	41	15,287	15,411	338	380	3,317	4,423	74	100	700	954
E.S.C.	563	468	68,285	64,509	121	138	7,855	10,252	14	22	1,973	2,382
Ky.	151	133	17,031	16,265	113	122	2,305	2,958	15	22	518	592
Tenn.	158	133	16,081	15,268	102	114	2,095	2,737	18	21	475	529
Ala.	116	93	16,543	15,226	143	165	1,480	1,902	13	21	414	537
Miss.	138	109	18,630	17,752	135	163	1,974	2,655	14	24	566	724
W.S.C.	491	436	205,825	204,759	419	469	18,324	25,659	37	60	3,664	4,063
Ark.	95	80	16,450	16,655	173	207	1,797	2,935	19	37	639	830
La.	74	62	10,347	10,411	130	167	1,766	2,413	24	39	335	407
Okla.	95	89	35,801	36,077	378	407	3,002	4,366	32	49	581	601
Tex.	227	205	143,218	141,706	631	691	11,750	15,945	52	78	2,100	2,225
Mt.	149	134	264,428	268,004	1,774	1,998	10,878	13,650	73	102	2,354	2,538
Mont.	29	27	64,081	65,834	2,213	2,437	2,223	2,701	77	103	877	900
Idaho	34	30	15,232	15,302	455	516	1,701	2,022	51	68	438	478
Wyo.	10	9	36,200	37,053	3,715	4,100	1,774	1,043	79	115	162	161
Colo.	33	30	35,787	38,250	1,162	1,284	2,053	2,687	61	90	580	612
N. Mex.	16	14	46,203	47,647	2,908	3,354	1,086	1,663	68	117	197	227
Ariz.	7	6	40,203	40,559	5,558	6,202	1,051	2,141	270	331	388	469
Utah	18	16	12,689	12,887	712	817	755	910	42	58	156	169
Nev.	2	2	10,943	10,483	4,649	4,862	334	393	142	182	57	51
Pac.	200	172	80,190	80,886	401	472	17,355	23,131	(N.A.)	135	3,958	4,756
Wash.	52	46	18,717	19,053	363	418	2,455	2,931	48	64	509	637
Oreg.	43	40	21,236	20,500	499	516	1,857	2,349	44	59	412	428
Calif.	99	81	36,888	37,011	372	458	13,026	17,352	131	215	2,822	3,499
Alaska	(2)	(2)	888	1,959	2,421	5,120	18	18	48	47	3	4
Hawaii	6	5	2,461	2,354	394	484	(N.A.)	481	90	152	188	

N.A. Not available.

Z Less than 500.

<sup>1</sup> Based on reports for a sample of farms; for 1959, excludes Hawaii.

Source: Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1964, Vol II.

## Agriculture

## No. 916. FARMS—NUMBER, BY ECONOMIC CLASS, BY STATES: 1964

[Based on reports for a sample of farms. For composition of regions, see fig. I, p. xii. Totals for commercial farms and for other farms are given in table 917. For definition of commercial farm, see text, p. 580]

STATE	All farms	COMMERCIAL FARMS BY VALUE OF FARM PRODUCTS SOLD						OTHER FARMS		
		\$50-\$2,499	\$2,500-\$4,999	\$5,000-\$9,999	\$10,000-\$19,999	\$20,000-\$39,999	\$40,000 and over	Part-time	Part-retirement	Abnormal
U.S.	3,157,857	348,272	443,918	504,614	467,096	259,898	141,914	639,409	350,558	2,178
North	1,479,581	89,490	211,755	300,036	311,318	161,613	62,875	218,800	122,927	767
South	1,372,732	235,424	197,047	163,410	112,545	65,536	45,886	350,400	201,886	598
West	805,544	23,358	35,116	41,108	43,233	32,749	33,153	70,209	25,745	813
N.E.	41,957	2,801	3,799	5,249	6,747	5,412	4,271	8,885	4,677	116
Maine	12,875	1,022	966	1,040	1,366	1,464	2,052	3,245	1,699	21
N. H.	4,648	353	458	550	618	432	245	1,398	637	17
Vt.	9,247	452	806	1,666	2,885	1,410	359	1,383	653	13
Mass.	8,019	496	853	1,168	1,339	1,035	760	1,484	845	41
R. I.	1,100	85	111	134	155	162	101	243	102	7
Conn.	6,068	393	515	692	884	909	754	1,192	711	17
M.A.	160,237	11,081	18,545	24,714	30,520	17,522	7,273	34,725	16,688	169
N. Y.	66,510	3,568	7,424	11,147	14,544	8,375	3,318	12,415	5,665	64
N. J.	10,641	712	1,164	1,399	1,897	1,857	1,288	1,422	878	24
Pa.	83,086	6,801	9,957	12,168	14,079	7,290	2,667	20,888	9,145	91
E.N.C.	573,605	32,409	86,086	109,267	111,163	60,719	21,258	102,316	50,139	248
Ohio	120,381	9,016	18,902	20,302	18,043	9,040	3,113	28,378	13,511	76
Ind.	108,082	6,047	16,882	18,495	18,458	11,402	3,973	22,178	10,606	46
Ill.	132,822	5,414	14,421	23,010	32,876	25,449	9,966	18,320	8,323	31
Mich.	93,504	6,231	15,848	15,298	13,374	7,023	2,413	23,683	9,603	31
Wis.	118,816	5,701	20,038	32,162	28,417	7,805	1,793	14,757	8,096	52
W. N. C.	703,782	43,199	103,325	160,806	162,888	77,960	30,073	72,874	52,423	234
Minn.	131,163	8,665	20,968	33,872	31,410	11,384	3,438	18,378	8,021	27
Iowa	154,162	4,091	15,390	31,546	46,287	20,073	11,150	9,345	7,215	65
Mo.	147,315	17,257	24,888	23,778	17,849	7,888	3,425	31,565	20,633	32
N. Dak.	48,836	2,520	7,558	15,388	13,944	4,777	1,265	1,886	1,473	25
S. Dak.	49,703	2,374	7,572	14,671	13,638	5,181	1,839	1,940	2,434	49
Nebr.	80,163	3,229	11,322	20,130	20,993	10,766	4,904	4,076	4,724	19
Kans.	92,440	5,063	15,622	21,421	18,767	8,891	4,052	10,684	7,923	17
S.A.	468,377	70,445	65,222	66,287	46,860	25,230	16,567	111,362	66,130	274
Del.	4,401	305	477	537	719	701	713	588	367	4
Md.	20,760	1,644	2,843	2,996	3,100	2,374	1,510	4,186	2,086	21
Va.	80,354	13,578	22,462	9,882	5,536	2,976	1,784	20,089	13,988	59
W. Va.	34,504	7,154	2,494	1,602	973	466	289	13,604	7,837	25
N. C.	148,202	20,449	23,901	28,870	19,705	7,911	3,081	26,816	17,729	40
S. C.	50,248	10,336	8,659	7,597	3,815	1,990	1,486	14,681	7,657	27
Ga.	83,366	11,412	10,057	10,752	9,712	6,654	4,107	19,950	10,663	59
Fla.	40,542	5,567	4,329	4,051	3,300	2,458	3,597	11,388	5,813	39
E.S.C.	468,155	101,684	77,480	49,919	25,848	12,742	8,372	118,456	73,509	145
Ky.	133,038	27,212	26,342	19,496	9,135	2,840	993	26,750	20,228	42
Tenn.	133,446	28,500	23,365	13,804	8,552	2,885	1,287	35,673	21,379	42
Ala.	92,530	20,231	11,437	8,151	5,675	4,020	2,398	26,929	13,659	30
Miss.	109,141	25,732	16,336	8,468	4,486	3,047	3,694	29,104	18,243	31
W.S.C.	436,200	63,295	54,845	47,204	39,837	27,564	20,947	120,582	62,247	179
Ark.	79,898	14,170	8,740	6,598	6,200	5,338	5,301	22,183	11,341	27
La.	62,406	13,156	6,168	4,403	3,845	2,976	2,286	20,181	9,439	32
Okla.	88,728	11,611	13,263	12,822	9,684	4,514	1,084	24,081	10,450	37
Tex.	205,110	24,358	26,174	23,381	20,128	14,736	11,696	63,587	31,017	83
Mt.	134,115	9,985	17,931	22,673	23,550	15,457	10,958	23,408	9,538	615
Mont.	27,020	1,649	3,622	5,518	6,575	3,860	1,569	2,940	1,397	90
Idaho	29,661	1,628	4,080	5,404	5,686	3,514	2,110	5,174	1,964	101
Wyo.	9,038	554	1,260	1,797	1,830	1,245	795	1,005	522	31
Colo.	29,798	2,638	4,139	5,047	5,052	3,557	2,720	4,601	1,915	39
N. Mex.	14,206	1,887	1,623	1,633	1,600	1,284	1,187	3,327	1,644	61
Ariz.	6,477	544	537	585	627	643	1,636	1,343	472	90
Utah	16,769	992	2,604	2,886	1,902	1,111	657	4,532	1,495	180
Nev.	2,156	193	267	303	278	268	304	396	129	23
Pac.	171,429	13,373	17,185	18,495	19,683	17,292	22,195	46,801	16,207	198
Wash.	45,574	3,484	4,262	4,532	5,715	4,980	3,463	14,617	4,537	25
Oreg.	39,757	3,520	4,386	4,180	4,047	3,071	2,301	13,649	4,566	37
Calif.	80,852	5,751	7,821	9,185	9,471	8,981	16,120	16,836	6,615	112
Alaska	382	58	40	24	30	28	33	149	17	3
Hawaii	4,804	580	686	594	420	263	278	1,560	472	21

Source: Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1964, Vol. II.

## Farms

587

## No. 917. FARMS—NUMBER, BY TYPE, BY STATES: 1964

[Based on reports for a sample of farms. In general, a farm was classified as a particular type if its sales of a particular product or group of products amounted to 50 percent or more of total value of farm products sold. For definition of commercial farm, see text, p. 580. For composition of regions, see fig. I, p. xii.]

STATE	All farms	COMMERCIAL FARMS										Other farms <sup>3</sup>
		Total <sup>1</sup>	Cash grain	Cotton	Other field crop	Vegetable	Fruit and nut	Dairy	Poultry	Livestock <sup>2</sup>	General	
		Total <sup>1</sup>	12.8	5.2	1.1	0.7	1.8	11.0	2.6	18.4	0.4	31.4
U.S.	3,157,857	2,165,712	404,253	164,076	35,180	23,207	57,256	366,967	82,120	580,811	201,980	992,145
Percent.	100.0	68.6										
North-	1,479,681	1,137,087	309,880	3,484	7,996	9,005	12,236	286,765	28,884	348,876	98,840	342,494
South-	1,372,732	819,349	66,438	154,336	18,184	9,137	12,595	57,982	46,998	168,018	78,777	552,884
West-	305,544	208,776	27,955	6,256	8,050	5,065	32,425	22,220	6,238	63,917	24,361	96,767
N.E.	41,957	28,279	60	(X)	2,146	844	1,345	18,029	4,161	1,534	1,564	13,678
Maine	12,375	7,910	53	(X)	1,908	98	418	2,039	1,656	425	455	4,965
N.H.	4,648	2,656	1	(X)	24	59	120	1,300	433	163	202	1,922
Vt.	9,247	7,168	1	(X)	22	34	61	5,848	152	276	413	2,079
Mass.	8,019	5,649	1	(X)	98	414	502	1,994	871	337	279	2,370
R.I.	1,100	748	—	(X)	43	57	28	243	126	53	33	352
Conn.	6,068	4,148	4	(X)	51	182	168	1,605	923	258	181	1,920
M.A.	160,237	109,655	5,343	(X)	1,480	4,345	4,311	59,666	8,218	9,910	9,079	50,562
N.Y.	66,510	48,376	1,669	(X)	718	1,430	2,639	31,185	1,903	2,505	3,472	18,134
N.J.	10,641	8,317	421	(X)	262	1,409	610	1,908	1,571	419	416	2,324
Pa.	83,086	52,962	3,353	(X)	510	586	1,002	26,563	4,654	6,926	5,191	30,124
E.N.C.	573,605	420,902	131,424	14	1,855	4,022	6,091	129,832	9,521	93,281	31,775	152,703
Ohio	120,381	78,416	23,105	(X)	227	822	805	17,823	2,760	19,966	8,436	41,965
Ind.	108,082	75,252	20,975	(X)	102	409	267	8,964	2,801	24,075	6,393	32,880
Ill.	132,182	111,136	60,449	14	28	410	280	9,025	1,008	31,971	6,361	21,686
Mich.	93,504	60,187	15,418	(X)	1,027	1,335	4,181	20,230	1,734	8,725	5,287	33,817
Wis.	118,816	95,911	2,477	(X)	471	1,037	498	73,790	1,218	8,544	5,208	22,905
W.N.C.	703,782	578,251	173,033	3,470	2,515	654	489	84,238	6,984	244,151	56,422	125,531
Minn.	131,163	103,737	25,658	(X)	1,153	274	100	42,474	1,974	28,358	13,278	21,426
Iowa	154,182	137,537	36,671	(X)	33	115	62	12,961	1,529	72,602	12,882	16,625
Mo.	147,315	95,085	19,229	3,470	41	143	247	14,491	1,870	45,948	7,066	52,230
N. Dak.	48,836	45,462	25,621	(X)	726	3	3	2,418	212	8,914	4,359	3,384
S. Dak.	49,703	45,280	7,999	(X)	66	14	6	3,759	470	27,857	4,867	4,423
Nebr.	80,163	71,344	23,004	(X)	428	20	11	3,298	413	37,249	6,824	8,819
Kans.	92,440	73,810	31,853	(X)	70	75	60	4,837	616	28,223	7,487	18,624
S.A.	468,377	290,611	16,669	18,804	8,230	4,440	9,645	18,619	24,250	36,667	30,030	177,766
Del.	4,401	3,452	946	(X)	48	102	21	454	1,494	111	176	949
Md.	20,760	14,407	2,055	(X)	46	382	129	3,923	1,846	1,599	1,068	6,293
Va.	80,354	46,218	2,817	73	2,233	418	719	5,459	2,198	9,468	3,834	34,136
W. Va.	34,504	12,978	253	(X)	43	66	452	1,950	1,102	5,879	902	21,526
N.C.	148,202	103,617	5,308	3,108	1,858	814	514	3,806	5,685	5,725	7,965	44,585
S.C.	50,248	33,583	2,417	8,485	99	665	108	997	1,052	2,676	3,689	22,365
Ga.	83,369	62,694	2,129	9,955	3,031	558	237	1,652	823	7,377	10,082	30,672
Fla.	40,542	23,302	744	1,833	872	1,507	7,375	578	1,014	3,832	1,414	17,240
E.S.C.	468,155	276,045	12,785	73,835	2,807	1,506	969	25,619	11,288	47,402	27,198	192,110
Ky.	133,088	80,018	3,344	48	126	130	250	10,011	836	15,288	10,120	47,020
Tenn.	133,446	75,352	3,461	16,072	197	501	208	10,133	1,707	14,982	8,611	57,094
Ala.	92,530	51,912	3,022	22,142	2,190	573	135	1,414	5,884	7,898	5,404	40,618
Miss.	109,141	61,765	2,968	35,573	294	302	376	4,061	2,861	9,264	3,068	47,378
W.S.C.	436,200	253,193	36,984	61,697	7,147	3,191	1,981	13,744	11,460	83,949	21,551	183,008
Ark.	79,898	46,347	6,783	14,385	102	735	475	3,064	5,506	10,742	2,016	33,551
La.	62,466	32,814	4,236	11,066	2,776	480	735	2,403	920	5,910	1,554	29,652
Oklahoma	88,726	53,558	13,059	2,898	1,746	172	205	3,410	823	22,397	6,934	35,168
Tex.	205,110	120,474	12,906	33,348	2,523	1,798	566	4,867	4,211	44,900	11,047	84,637
Mt.	134,115	100,554	18,177	2,997	5,799	773	1,678	9,723	1,304	43,029	13,938	33,561
Mont.	27,020	22,593	8,600	(X)	684	16	73	712	142	10,440	1,642	4,427
Idaho	29,661	22,422	3,891	(X)	3,110	90	220	4,555	191	5,521	4,349	7,239
Wyo.	9,038	7,480	685	(X)	370	5	2	395	40	5,029	781	1,558
Colo.	29,798	23,153	3,827	(X)	1,490	300	479	1,886	285	11,057	3,870	6,645
N. Mex.	14,206	9,174	441	1,716	103	83	220	298	94	4,719	1,038	5,032
Ariz.	6,477	4,572	193	1,264	19	164	363	233	135	1,460	449	1,905
Utah	15,759	9,552	514	(X)	294	97	319	2,088	410	3,873	1,493	6,207
Nev.	2,156	1,608	26	17	10	18	2	128	7	930	416	548
Pac.	171,429	108,222	9,778	3,259	3,151	4,292	30,747	12,497	4,934	20,888	10,423	63,206
Wash.	45,874	26,395	5,064	(X)	918	751	4,679	4,000	893	5,246	2,071	19,179
Oreg.	39,757	21,505	1,974	(X)	708	797	2,920	2,668	773	6,309	3,423	18,252
Calif.	80,852	57,288	2,731	3,259	852	2,324	22,459	5,643	3,104	8,783	4,079	23,563
Alaska	382	213	8	(X)	647	415	689	66	148	555	18	2,043
Hawaii	4,864	2,821	1	(X)								

<sup>1</sup> Represents zero. <sup>X</sup> Not applicable.

<sup>2</sup> Includes dairy and poultry farms; includes ranches.

<sup>3</sup> Part-time, part-retirement, and abnormal farms. For definition, see source.

Source: Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1964, Vol. II.

No. 918. VALUE OF ALL FARM PRODUCTS SOLD, BY SOURCE OF INCOME, 1959 AND 1964, AND BY STATES, 1964

[In millions of dollars. For 1959, dairy products and livestock sold alive based on a sample of farms for all States except Alaska and Hawaii]

YEAR AND STATE	All farm products sold <sup>1</sup>	Field crops <sup>2</sup>	Vegetables	Fruits and nuts	Horticultural specialties <sup>3</sup>	Dairy products	Poultry and poultry products	Livestock and livestock products <sup>4</sup>
1959	30,493	10,493	740	1,398	803	4,022	2,258	10,760
1964								
United States	35,294	12,870	987	1,674	880	4,637	3,063	11,141
New England								
Maine	716	186	15	28	55	232	162	37
New Hampshire	256	127	3	6	8	32	73	6
Vermont	49	2	1	3	4	21	15	4
Massachusetts	115	6	(z)	2	5	87	5	10
Rhode Island	139	16	7	13	20	47	26	10
Connecticut	19	3	1	(z)	3	6	4	1
Middle Atlantic	1,859	218	94	106	148	819	257	206
New York	853	97	44	57	50	442	82	73
New Jersey	216	21	37	22	28	49	44	14
Pennsylvania	701	100	14	27	70	328	131	118
East North Central	6,106	2,236	101	104	157	1,245	329	1,929
Ohio	1,013	336	23	13	55	192	85	306
Indiana	1,105	458	10	6	20	107	102	402
Illinois	2,123	1,075	17	6	30	133	43	818
Michigan	766	238	26	69	31	208	46	146
Wisconsin	1,099	128	25	9	20	604	53	258
West North Central	8,733	2,877	18	8	46	775	344	4,661
Minnesota	1,376	447	10	1	12	311	106	487
Iowa	2,597	720	3	1	11	179	97	1,685
Missouri	1,063	384	3	4	13	102	64	481
North Dakota	570	373	(z)	(z)	1	32	8	156
South Dakota	620	144	(z)	(z)	1	41	24	418
Nebraska	1,334	368	(z)	(z)	3	49	25	830
Kansas	1,175	440	1	1	6	62	18	648
South Atlantic	4,142	1,651	204	459	171	396	797	460
Delaware	108	18	5	1	3	7	70	3
Maryland	276	67	11	5	11	72	81	30
Virginia	470	181	11	18	20	76	70	94
West Virginia	92	7	1	11	5	18	23	29
North Carolina	1,068	723	10	7	23	61	171	73
South Carolina	349	226	12	7	11	26	37	30
Georgia	828	316	9	9	32	50	289	118
Florida	964	114	146	402	67	86	56	83
East South Central	2,382	1,231	16	12	55	238	358	469
Kentucky	502	300	2	2	8	78	20	181
Tennessee	529	287	7	3	16	76	42	128
Alabama	537	214	5	2	22	38	170	85
Mississippi	724	460	2	5	10	46	128	75
West South Central	4,063	2,162	52	24	41	249	399	1,180
Arkansas	830	530	4	6	6	26	62	62
Louisiana	407	267	3	5	7	47	30	46
Oklahoma	601	244	2	8	7	47	22	275
Texas	2,226	1,122	42	10	20	128	151	746
Mountain	2,537	900	83	40	29	169	55	1,253
Montana	390	170	(z)	(z)	2	12	3	201
Idaho	478	254	5	6	2	44	8	159
Wyoming	161	30	(z)	(z)	(z)	6	1	113
Colorado	612	164	12	5	11	34	13	381
New Mexico	227	82	3	4	1	14	4	118
Arizona	460	175	59	22	9	25	7	169
Utah	159	27	2	3	2	27	19	78
Nevada	61	9	1	(z)	(z)	6	(z)	35
Pacific	4,756	1,409	405	893	178	509	362	995
Washington	637	241	23	97	21	76	37	142
Oregon	428	135	29	46	22	42	28	126
California	3,499	894	348	744	132	377	288	712
Alaska	4	1	(z)	(z)	(z)	2	(z)	(z)
Hawaii	188	139	5	6	3	12	10	14

Z. Less than \$500,000.

<sup>1</sup> 1954 includes recreation income from hunting, fishing, and other recreational services not shown separately.

<sup>2</sup> Other than vegetables and fruits and nuts. <sup>3</sup> Includes forest products. <sup>4</sup> Other than dairy and poultry.

Source: Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1964, Vol. II.

## No. 919. FARMS—NUMBER, ACREAGE, AND VALUE, BY TENURE OF OPERATOR: 1940 TO 1964

[Number of farms in thousands; land in farms in millions of acres, except as indicated. Minority race breakdown for "all farms" for 1954 and 1960, and average value of farms, 1950 through 1964, based on sample. See also *Historical Statistics, Colonial Times to 1957*, series K 8-52]

ITEM	All farms	Full owner	Part owner	Manager	TENANT	
					Total	Percent of all farms
NUMBER OF FARMS						
United States: 1940	6,102	3,085	616	37	2,365	38.8
1950	5,388	3,092	826	24	1,447	26.9
1954 <sup>1</sup>	4,782	2,737	857	21	1,168	24.4
1959	3,711	2,119	811	21	700	20.5
1964	3,158	1,818	782	18	540	17.1
The South: 1940	3,007	1,828	217	14	1,449	48.2
1950	2,652	1,411	326	10	905	34.1
1954	2,317	1,266	345	9	696	30.0
1959	1,646	942	314	9	381	23.1
1964	1,373	809	304	7	254	18.5
Minority races: 1940	680	142	31	(Z)	507	74.6
1950	559	141	52	(Z)	366	65.5
1954	463	130	51	(Z)	283	60.9
1959	266	90	38	(Z)	138	51.9
1964	185	71	31	(Z)	82	44.3
LAND IN FARMS						
United States: 1940	1,065	382	301	69	313	29.4
1950	1,161	419	423	107	212	18.3
1954 <sup>1</sup>	1,158	398	470	100	193	16.7
1959	1,124	349	498	110	167	14.9
1964	1,110	319	583	113	145	13.1
AVERAGE VALUE OF FARMS (land and buildings)						
United States: 1940	\$5,532	\$4,959	\$9,936	\$42,208	\$4,586	(X)
1950	13,932	10,719	25,137	153,043	12,026	(X)
1954 <sup>1</sup>	10,761	14,511	35,764	165,800	19,404	(X)
1959 <sup>2</sup>	33,175	22,478	58,860	244,714	36,169	(X)
1964	50,646	(NA)	(NA)	(NA)	(NA)	(X)

NA. Not available. X. Not applicable. Z. Less than 600.

<sup>1</sup> Excludes Alaska and Hawaii. <sup>2</sup> Excludes Hawaii.

Source: Dept. of Commerce, Bureau of the Census; *U.S. Census of Agriculture: 1950*, Vol. II, and *1964*, Vol. II.

## No. 920. FARMER COOPERATIVES—NUMBER, MEMBERSHIPS, AND BUSINESS: 1940 TO 1968

[For years ending June 30, with limited exceptions. Prior to 1955, excludes Alaska and Hawaii. Comprises independent local associations, federations, large-scale centralized associations, and sales agencies. Data are for marketing season during which farm products are moved into channels of trade. Marketing seasons overlap. See also *Historical Statistics, Colonial Times to 1957*, series K 181-189]

YEAR	COOPERATIVES LISTED			ESTIMATED MEMBERSHIPS <sup>2</sup> (1,000)			ESTIMATED BUSINESS <sup>3</sup> (mil. dol.)		
	Total	Marketing <sup>1</sup>	Farm supply	Total	Marketing <sup>1</sup>	Farm supply	Total	Marketing <sup>1</sup>	Farm supply
1940	10,700	8,051	2,649	8,200	2,300	600	2,087	1,729	358
1945	10,150	7,400	2,750	4,606	2,895	1,610	5,645	4,835	810
1950	10,035	6,922	3,113	6,584	4,075	2,506	8,726	7,088	1,643
1955	9,903	6,557	3,346	7,604	4,281	3,323	9,642	7,620	2,022
1960	9,345	6,048	3,297	7,273	3,673	3,600	12,036	9,628	2,408
1964	8,847	5,621	3,226	7,080	3,655	3,425	14,354	11,522	2,832
1965	8,583	5,498	3,085	7,082	3,831	3,251	14,742	11,832	2,910
1966	8,329	5,380	2,949	6,820	3,672	3,154	15,608	12,523	3,085
1967	8,125	5,254	2,871	6,502	3,333	3,109	16,557	13,218	3,339
1968 (prel.)	7,940	5,105	2,835	6,415	3,268	3,187	17,034	13,618	3,521

<sup>1</sup> Includes service associations.

<sup>2</sup> Excludes nonvoting patrons.

<sup>3</sup> Value of commodities sold or purchased for patrons and charges for rendering other services in marketing or purchasing. Beginning 1955, adjusted for duplication resulting from intercooperative business.

Source: Dept. of Agriculture, Farmer Cooperative Service; annual report, *Statistics of Farmer Cooperatives*.

## No. 921. LAND UTILIZATION, FARM AND NONFARM: 1930 TO 1964

[In millions of acres. Prior to 1950, excludes Alaska and Hawaii]

MAJOR USE	1930		1940		1950		1959		1964	
	Land	Percent								
Total land area.....	1,903	100.0	1,905	100.0	2,273	100.0	2,271	100.0	2,266	100.0
In farms.....	987	51.9	1,061	55.7	1,162	51.1	1,124	49.5	1,110	49.0
Cropland <sup>1</sup> .....	413	21.7	399	20.9	409	18.0	392	17.3	387	17.1
Grassland pasture <sup>2</sup> .....	379	19.9	461	24.2	486	21.4	534	23.5	547	24.1
Woodland pasture.....	85	4.5	100	5.2	135	5.9	93	4.1	82	3.6
Woodland not pastured.....	65	3.4	57	3.0	86	3.8	70	3.1	64	2.8
Farmsteads, roads, and other land.....	45	2.4	44	2.3	46	2.0	37	1.6	30	1.3
Not in farms.....	916	48.1	844	44.3	1,111	48.9	1,147	50.5	1,156	51.0
Grazing land.....	578	30.4	504	26.4	402	17.7	319	14.0	293	12.9
Forest land not grazed.....	208	10.9	203	10.7	368	16.2	438	19.3	443	19.5
Other land <sup>3</sup> .....	180	6.8	137	7.2	341	15.0	390	17.2	420	18.5

<sup>1</sup> Comprises cropland used for crops, soil improvement crops, and idle cropland.<sup>2</sup> Includes cropland used only for pasture.<sup>3</sup> Includes grassland, arid woodland, and shrub and other forested land grazed.<sup>4</sup> Excludes forest areas in parks and most other special uses.<sup>5</sup> Comprises urban, industrial, and residential areas; rural parks; wildlife refuges; highway, road, and railroad rights-of-way; ungrazed desert; rocky, barren, swamp, tundra, and other land not otherwise counted.Source: Dept. of Agriculture, Economic Research Service. In annual report, *Agricultural Statistics*.

## No. 922. COMMERCIAL FERTILIZERS CONSUMED: 1940 TO 1968

[Quantity in thousands of tons. For years beginning July 1, except as noted. Includes Puerto Rico. Includes fertilizers distributed by Government agencies. See *Historical Statistics, Colonial Times to 1957*, series K 100, for related but not comparable data]

YEAR	ALL FERTILIZERS <sup>1</sup>			MIXED FERTILIZERS			Other fertilizers (quantity)		
	Quantity	Percent		Quantity	Percent				
		Nitrogen	Phosphoric oxide	Potash	Nitrogen	Phosphoric oxide	Potash		
1940 <sup>2</sup> .....	8,556	4.0	10.7	5.1	5,513	3.8	9.6	6.5	100
1960.....	20,345	6.1	10.4	6.8	13,978	4.2	11.0	9.0	646
1965.....	21,404	9.0	10.5	8.8	14,770	5.4	12.1	11.2	790
1966.....	24,874	12.4	10.9	8.9	15,735	6.8	13.2	12.0	1,194
1967.....	33,071	16.1	11.8	9.7	19,650	8.1	15.8	12.6	1,461
1968 (prel.).....	37,126	18.3	12.0	10.2	21,294	8.8	16.8	12.7	1,617
	37,383	18.3	12.3	10.3	21,378	9.0	17.2	12.6	1,318

<sup>1</sup> Products containing primary nutrients.<sup>2</sup> Calendar year.Source: Dept. of Agriculture, Statistical Reporting Service. In annual report, *Agricultural Statistics*.

## No. 923. FARM MACHINERY AND EQUIPMENT: 1950 TO 1969

[Excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1957*, series K 150-158]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)
Value of farm implements and machinery <sup>1</sup> mil. dol.	12,166	18,595	22,344	25,522	27,003	28,917	31,136	32,637
Number on farms, Jan. 1:								
Tractors <sup>2</sup> .....	1,000	3,394	4,345	4,685	4,783	4,800	4,815	4,820
Motortrucks.....	1,000	2,207	2,875	2,826	3,023	3,100	3,130	3,160
Automobiles.....	1,000	4,100	4,140	3,629	3,587	(NA)	(NA)	(NA)
Grain combines.....	1,000	714	980	1,042	910	895	880	870
Corn pickers <sup>3</sup> .....	1,000	466	688	792	690	676	655	640
Pickup balers.....	1,000	196	448	680	751	765	775	785
Field forage harvesters.....	1,000	81	202	290	316	320	322	325
Farms with milking machines.....	1,000	636	712	666	500	(NA)	(NA)	(NA)
Farmers' expenditures:								
Motor vehicles <sup>4</sup> .....	mil. dol.	1,734	1,482	1,227	2,121	2,400	2,364	2,446
Machinery and equipment.....	mil. dol.	1,418	1,278	1,486	2,097	2,349	2,589	2,503

<sup>1</sup> Represents zero. N.A. Not available.<sup>2</sup> Inventory valuations at beginning of year. Includes family automobiles.<sup>3</sup> Excludes garden tractors. <sup>4</sup> Includes picker-shellers.<sup>4</sup> For farm business use.Source: Dept. of Agriculture, Economic Research Service; annual report, *The Balance Sheet of Agriculture* and monthly report, *Farm Income Situation*, July issue. Also in *Agricultural Statistics*.

## No. 924. IRRIGATION AND DRAINAGE—SUMMARY: 1920 TO 1959

[Data are for 17 Western States (Alaska and Hawaii excluded, except as noted) and Louisiana. Relates to multiple farm organizations only. Based on reports of management of organizations. An organization is defined as a group of two or more water users, a company, a corporation, or a governmental district or agency that operates facilities to supply water for irrigation of farm or ranch lands. It may be a formal legal arrangement or an informal cooperative arrangement.]

ITEM		1920	1930	1940	1950	1959
Approximate land area <sup>1</sup>	mil. acres	1,195	1,194	1,195	1,195	1,193
Farms (irrigated and nonirrigated) <sup>1</sup>	1,000	1,689	1,826	1,686	1,436	1,050
Land in all farms <sup>1</sup>	mil. acres	491	555	613	702	717
Irrigation organizations:						
Organizations	number	(NA)	4,342	5,583	10,491	18,765
Area irrigated	mil. acres	12	13	16	15	18
Investment in irrigation organizations	mil. dol.	543	705	865	1,385	2,424
Increase over preceding census	percent	(NA)	29.8	22.7	60.1	75.0
Average per acre irrigated	dollars	44	54	53	92	137
Total drainage areas <sup>2</sup>	mil. acres	96	128	133	107	99

NA. Not available. <sup>1</sup> Includes Hawaii.

<sup>2</sup> Includes some duplication for some areas in more than 1 enterprise (overlapped).

Source: Dept. of Commerce, Bureau of the Census; *U.S. Census of Agriculture: 1920*, Vol. VII; 1930 and 1940 *Irrigation of Agricultural Lands*; and *U.S. Census of Agriculture: 1950*, and *1959*, Vol. III and IV.

## No. 925. FEDERAL IRRIGATION PROJECTS: 1950 TO 1968

[Acreage in thousands; value in millions of dollars]

YEAR	ENTIRE AREA			FULL IRRIGATION SERVICE <sup>1</sup>			SUPPLEMENTAL AND TEMPORARY IRRIGATION SERVICE <sup>2</sup>		
	Irrigable acreage	Irrigated acreage	Gross crop value	Irrigable acreage	Irrigated acreage	Gross crop value	Irrigable acreage	Irrigated acreage	Gross crop value
1950	6,025	5,077	578	3,305	2,716	311	2,720	2,361	267
1955	7,868	6,282	828	3,826	3,163	429	3,542	3,099	399
1960	8,171	6,900	1,168	4,326	3,488	581	3,845	3,412	677
1965	9,612	8,012	1,557	4,540	3,731	675	5,072	4,281	882
1966	9,624	8,011	1,693	4,577	3,786	778	5,047	4,225	915
1967	10,037	8,441	1,822	4,019	3,867	767	5,418	4,574	1,055
1968	9,904	8,387	1,840	4,683	3,940	813	5,221	4,447	1,027

<sup>1</sup> Applied to irrigable land receiving its sole irrigation supply through Bureau-constructed facilities and to previously irrigated land in non-Federal projects where a substantial part of the facilities was constructed, rehabilitated, or replaced by the Bureau.

<sup>2</sup> Applies to irrigable land receiving irrigation water through Bureau projects in addition to supply from non-project sources and to land for which water is delivered under temporary arrangements.

Source: Dept. of the Interior, Bureau of Reclamation; annual report, *Crop Report and Related Data, Federal Reclamation Projects*.

## No. 926. GROWTH OF CONSERVATION DISTRICTS: 1950 TO 1969

[For years ending June 30. Includes Puerto Rico and Virgin Islands]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969
Number organized:								
Each year	121	56	6	18	6	15	2	5
Cumulative total	2,285	2,674	2,807	2,989	2,995	3,010	3,012	3,017
With supplemental memorandum: <sup>1</sup>								
Each year	133	63	23	13	19	13	11	7
Cumulative total	2,207	2,644	2,837	2,921	2,940	2,953	2,964	2,971
Area in districts:								
New and additions	75	49	10	14	16	13	16	8
Cumulative total	1,253	1,485	1,672	1,763	1,769	1,782	1,798	1,806

<sup>1</sup> Signed for assistance from Soil Conservation Service.

Source: Dept. of Agriculture, Soil Conservation Service; *Report of Administrator of Soil Conservation Service*.

## No. 927. BALANCE SHEET OF AGRICULTURE: 1940 TO 1970

[In billions of dollars. As of January 1. Excludes Alaska and Hawaii]

ITEM	1940	1945	1950	1955	1960	1965	1968	1969	1970 (prel.)
<b>Assets</b>	<b>52.9</b>	<b>94.2</b>	<b>132.5</b>	<b>165.1</b>	<b>203.1</b>	<b>238.5</b>	<b>283.4</b>	<b>298.0</b>	<b>307.1</b>
Physical assets:									
Real estate.....	33.6	53.9	75.3	98.2	130.2	160.9	193.1	202.6	208.6
Non-real-estate:									
Livestock <sup>1</sup> .....	5.1	9.0	12.9	11.2	15.2	14.5	18.8	20.1	
Machinery and motor vehicles.....	3.1	6.5	12.2	18.6	22.2	25.5	31.1	32.6	74.7
Crops stored on and off farms <sup>2</sup> .....	2.7	6.7	7.6	9.6	7.7	9.2	9.6	10.5	
Household furnishings and equipment.....	4.2	5.6	8.6	10.0	9.6	8.6	8.7	9.1	
Financial assets:									
Deposits and currency.....	3.2	7.9	9.1	9.4	9.2	9.6	10.9	11.5	
United States savings bonds.....	.2	3.4	4.7	5.0	4.7	4.2	3.8	3.8	23.8
Investments in cooperatives.....	.8	1.2	2.1	3.1	4.3	6.0	7.4	7.8	
<b>Claims</b>	<b>52.9</b>	<b>94.2</b>	<b>132.5</b>	<b>165.1</b>	<b>203.1</b>	<b>238.5</b>	<b>283.4</b>	<b>298.0</b>	<b>307.1</b>
Liabilities:									
Real estate debt.....	10.0	8.3	12.4	17.6	24.8	37.5	50.4	54.6	58.1
Non-real-estate debt to—									
Commodity Credit Corporation <sup>3</sup> .....	.4	.7	1.7	2.2	1.2	1.5	1.4	2.7	2.6
Other reporting institutions <sup>4</sup> .....	1.5	1.6	2.8	4.0	6.7	10.0	13.7	14.5	26.8
Nonreporting creditors <sup>5</sup> .....	1.6	1.1	2.3	3.2	4.8	7.1	9.8	10.8	
Proprietors' equities.....	42.9	85.9	120.1	147.5	178.3	201.0	233.0	243.4	249.0

<sup>1</sup> Beginning 1965, excludes horses and mules. <sup>2</sup> Includes all crops held on farms and crops held off farms by farmers as security for CCC loans. The latter totaled \$1,188 million on Jan. 1, 1969.

<sup>3</sup> Nonrecourse CCC loans secured by crops owned by farmers are included as assets in this balance sheet.

<sup>4</sup> Loans of all operating banks, production credit associations, and Farmers Home Administration, and discounts of Federal Intermediate credit banks for agricultural credit corporations and livestock loan companies.

<sup>5</sup> Loans and credits extended by dealers, merchants, finance companies, individuals, and others. Estimates based on fragmentary data.

Source: Dept. of Agriculture, Economic Research Service; *The Balance Sheet of the Farming Sector*.

## No. 928. FARM REAL ESTATE—INDEXES OF AVERAGE VALUE OF LAND AND BUILDINGS PER ACRE, BY STATES: 1940 TO 1970

[1957-59=100. As of March 1]

STATE	1940	1950	1960	1965	1970 <sup>1</sup>	STATE	1940	1950	1960	1965	1970 <sup>1</sup>
<b>United States<sup>2</sup></b>	<b>30</b>	<b>65</b>	<b>111</b>	<b>139</b>	<b>186</b>	<b>South Atlantic—Con.</b>					
New England:						Virginia.....	30	62	109	135	192
Maine.....	61	71	111	128	173	West Virginia.....	44	72	110	131	171
New Hampshire.....	66	80	114	144	207	North Carolina.....	26	65	106	141	177
Vermont.....	48	84	114	151	231	South Carolina.....	28	64	112	144	204
Massachusetts.....	59	78	116	142	200	Georgia.....	25	56	118	167	280
Rhode Island.....	49	76	117	149	214	Florida.....	27	45	118	159	193
Connecticut.....	47	73	113	135	189	<b>East South Central:</b>					
Middle Atlantic:						Kentucky.....	29	70	112	148	189
New York.....	43	75	107	130	181	Tennessee.....	30	74	112	150	210
New Jersey.....	35	57	113	137	209	Alabama.....	29	62	113	159	232
Pennsylvania.....	36	62	111	141	214	Mississippi.....	25	58	108	148	236
East North Central:						<b>West South Central:</b>					
Ohio.....	27	59	105	125	168	Arkansas.....	24	62	115	183	271
Indiana.....	25	60	107	125	162	Louisiana.....	31	56	117	154	237
Illinois.....	29	63	106	124	161	Oklahoma.....	31	67	115	158	221
Michigan.....	28	62	109	127	175	Texas.....	34	63	117	159	204
Wisconsin.....	43	74	107	118	174	<b>Mountain:</b>					
West North Central:						Montana.....	24	57	116	142	188
Minnesota.....	32	63	108	121	165	Idaho.....	26	65	110	126	159
Iowa.....	34	73	108	117	168	Wyoming.....	27	68	113	141	180
Missouri.....	31	66	109	140	211	Colorado.....	26	74	111	136	165
North Dakota.....	29	64	111	138	187	New Mexico.....	26	77	109	146	177
South Dakota.....	31	73	109	135	169	Arizona.....	24	58	112	132	140
Nebraska.....	33	73	110	135	180	Utah.....	32	70	108	127	160
Kansas.....	29	70	108	131	164	Nevada.....	32	64	108	132	155
South Atlantic:						<b>Pacific:</b>					
Delaware.....	31	55	118	153	218	Washington.....	30	66	107	122	165
Maryland.....	27	54	113	157	243	Oregon.....	29	69	108	129	168
						California.....	26	58	116	160	166

<sup>1</sup> Includes improvements. <sup>2</sup> Excludes Alaska and Hawaii.

Source: Dept. of Agriculture, Economic Research Service; *Farm Real Estate Market Developments*.

# Farm Income and Expenses

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## No. 929. FARM INCOME AND EXPENSES: 1950 TO 1969

[In millions of dollars, except as indicated. Excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1957*, series K 81, K 122-128, and K 159]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)
<b>Income from farming, realized gross</b>	<b>32,271</b>	<b>33,128</b>	<b>38,088</b>	<b>44,826</b>	<b>49,740</b>	<b>48,960</b>	<b>51,132</b>	<b>54,616</b>
Cash receipts from marketings	28,461	29,490	34,154	39,350	43,204	42,693	44,388	47,431
Crops	12,356	13,523	15,208	17,392	18,373	18,401	18,847	18,539
Livestock and livestock products	16,105	15,907	18,946	21,958	24,921	24,292	25,539	28,492
Government payments	283	229	702	2,463	3,277	3,070	3,462	3,800
Value of home consumption	2,063	1,678	1,250	813	817	732	705	735
Rental value of dwellings	1,464	1,741	1,081	2,300	2,362	2,456	2,579	2,650
<b>Total expenses of agricultural production</b>	<b>19,410</b>	<b>21,889</b>	<b>26,352</b>	<b>30,933</b>	<b>33,406</b>	<b>34,762</b>	<b>36,346</b>	<b>38,571</b>
Operating expense (excluding hired labor)	11,518	12,974	16,045	18,754	20,481	21,226	21,000	23,176
Feed purchased	3,283	3,880	4,923	5,749	6,324	6,448	6,474	6,770
Livestock purchased	2,004	1,539	2,502	2,913	3,498	3,391	3,628	4,266
Seed purchased <sup>1</sup>	518	568	510	687	626	678	668	670
Fertilizer and lime	975	1,185	1,315	1,754	1,052	2,115	2,005	1,949
Repairs and operations of capital items <sup>2</sup>	2,975	3,600	3,986	4,073	4,227	4,484	4,614	4,793
Miscellaneous <sup>3</sup>	1,763	2,204	2,829	3,628	3,854	4,110	4,430	4,728
Depreciation <sup>4</sup>	2,665	3,700	4,244	4,982	5,281	5,724	6,184	6,620
Taxes on farms	910	1,141	1,502	1,943	2,108	2,277	2,484	2,630
Interest on farm mortgage debt	264	402	628	1,077	1,205	1,343	1,480	1,602
Wages paid hired farm labor	2,811	2,615	2,923	2,849	2,889	2,878	3,042	3,237
Net rent to nonfarm landlords	1,233	1,057	1,010	1,328	1,442	1,313	1,297	1,297
<b>Realized net income of farm operators from farming</b>	<b>12,861</b>	<b>11,249</b>	<b>11,736</b>	<b>13,993</b>	<b>16,334</b>	<b>14,198</b>	<b>14,786</b>	<b>16,045</b>
Adjustment for inventory changes	+812	+215	+343	+994	-81	537	-111	200
<b>Total net income of farm operators from farming</b>	<b>13,673</b>	<b>11,464</b>	<b>12,079</b>	<b>14,987</b>	<b>16,253</b>	<b>14,735</b>	<b>14,675</b>	<b>16,245</b>
Average income per farm..... dollars	2,421	2,463	3,049	4,487	5,019	4,083	4,805	5,468
<b>Personal income from all sources</b>	<b>20,366</b>	<b>17,573</b>	<b>18,679</b>	<b>23,591</b>	<b>24,878</b>	<b>23,895</b>	<b>24,877</b>	<b>27,098</b>
Nonfarm sources	6,263	6,197	7,153	10,045	10,404	10,885	11,774	12,600

<sup>1</sup> Includes bulbs, plants, and trees. <sup>2</sup> Includes interest on non-real-estate debt, pesticides, ginning, electricity and telephones (business share), livestock marketing charges (excluding feed and transportation), containers, irrigation, grazing, milk hauling, binding materials, tolls for syrup, horses and mules, harness and saddleery, blacksmithing and hardware, veterinary services and medicines, net insurance premiums (crop, fire, wind, and hail), and miscellaneous supplies. <sup>3</sup> Includes other consumption of farm capital.

Source: Dept. of Agriculture, Economic Research Service; *The Farm Income Situation*.

## No. 930. FARM INCOME AND PRODUCTION EXPENSES, BY VALUE OF SALES CLASSES: 1960 AND 1969

VALUE OF SALES AND YEAR	REALIZED GROSS FARM INCOME		FARM PRODUCTION EXPENSES		REALIZED NET FARM INCOME		PER FARM AVERAGES (dollars)		
	Total (mil. dol.)	Percent of total	Total (mil. dol.)	Percent of total	Total (mil. dol.)	Percent of total	Realized gross	Production expenses	Farm operator realized net
<b>All farms:</b>									
1960	38,088	100.0	26,352	100.0	11,736	100.0	9,614	6,652	2,962
1969	54,598	100.0	38,444	100.0	16,154	100.0	18,377	12,940	4,537
Farms with sales of—									
Less than \$2,500:									
1960	3,299	8.7	1,728	6.6	1,571	13.4	1,785	935	850
1969	2,627	4.8	1,304	3.4	1,323	8.2	2,148	1,066	1,082
\$2,500-\$4,000:									
1960	2,888	7.6	1,678	6.4	1,210	10.3	4,681	2,720	1,901
1969	1,488	2.7	881	2.3	607	3.8	5,202	3,080	2,122
\$4,000-\$9,999:									
1960	5,652	14.8	3,471	13.2	2,181	18.0	8,564	5,259	3,305
1969	3,633	6.7	2,221	5.8	1,412	8.7	9,340	5,710	3,630
\$10,000-\$19,999:									
1960	7,867	20.6	5,199	19.7	2,668	22.7	15,820	10,461	5,368
1969	8,835	16.2	5,562	14.5	3,273	20.3	17,495	11,014	6,481
\$20,000-\$39,999:									
1960	6,766	17.8	4,802	18.2	1,964	16.7	20,806	21,154	8,652
1969	11,482	21.0	7,746	20.1	3,736	23.1	32,163	21,697	10,466
\$40,000 and over:									
1960	11,616	30.5	9,474	35.9	2,142	18.3	102,796	83,841	18,955
1969	26,533	48.6	20,730	53.0	5,803	35.9	125,749	98,246	27,503

Source: Dept. of Agriculture, Economic Research Service; *The Farm Income Situation*.

## No. 931. FARM INCOME—CASH RECEIPTS FROM FARM MARKETINGS: 1950 TO 1969

[In millions of dollars, except percent]

ITEM	TOTAL MARKET SALES							PERCENT DISTRIBUTION		
	1950	1955	1960	1965	1967	1968	1969 (prel.)	1960	1965	1969 (prel.)
Farm marketings.....	28,461	29,490	34,154	39,350	42,693	44,218	47,229	100.0	100.0	100.0
All crops.....	12,356	13,523	15,208	17,392	18,434	18,734	18,700	44.5	44.2	39.8
Cotton (lint and seed).....	2,434	2,580	2,340	2,330	1,095	1,311	1,059	6.8	5.9	2.2
Tobacco.....	1,061	1,225	1,154	1,186	1,392	1,173	1,266	3.4	3.0	2.7
Food grains.....	1,941	1,990	2,460	2,041	2,382	2,121	2,057	7.2	5.2	4.4
Oilbearing crops.....	935	1,131	1,364	2,173	2,805	2,863	2,910	4.0	5.5	6.2
Feed crops.....	2,143	2,555	3,025	3,669	4,337	4,322	4,379	8.0	9.3	9.3
Vegetables <sup>1</sup> .....	1,436	1,683	1,941	2,580	2,049	2,836	2,781	5.7	6.6	5.9
Fruits and tree nuts <sup>1</sup> .....	1,188	1,276	1,514	1,687	1,843	2,073	2,206	4.4	4.2	4.7
Other <sup>2</sup> .....	1,218	1,083	1,410	1,740	1,932	2,035	2,102	4.1	4.4	4.5
All livestock and products.....	16,105	15,967	18,946	21,953	24,250	25,484	28,439	55.5	55.8	60.2
Hogs.....	8,214	8,604	2,873	3,693	3,755	3,820	4,667	8.4	9.4	9.0
Cattle and calves.....	5,680	5,245	7,398	8,942	10,478	11,271	12,644	21.7	22.7	20.8
Sheep and lambs.....	887	316	327	329	300	316	327	1.0	0.8	0.7
Wool.....	130	91	108	95	75	72	72	0.3	0.2	0.2
Dairy products.....	3,710	4,217	4,753	5,037	5,743	5,955	6,172	13.9	12.8	13.1
Eggs.....	1,579	1,777	1,738	1,788	1,781	1,921	2,256	5.1	4.5	4.8
Broilers and farm chickens.....	946	1,070	1,127	1,304	1,315	1,416	1,634	3.3	3.3	3.5
Turkeys and other poultry <sup>3</sup> .....	814	377	427	489	544	400	533	1.3	1.2	1.1
Other <sup>4</sup> .....	136	180	195	281	268	223	134	0.6	0.7	0.8

<sup>NA</sup> Not available. <sup>1</sup> Melons included with vegetables.<sup>2</sup> Sugar crops, greenhouse and nursery products, forest products, legume and grass seeds, hops, mint, broomcorn, popcorn, hemp fiber and seed, and flax fiber.<sup>3</sup> Ducks, geese, guineas, pigeons, quail, pheasants, and turkey hatching eggs.<sup>4</sup> Horses and mules (1950 and 1955), mohair, honey, beeswax, bees, goats, rabbits, and fur animals.Source: Dept. of Agriculture, Economic Research Service; *The Farm Income Situation*.

## No. 932. FARM MARKETINGS, BY PRICE SUPPORT STATUS: 1950 TO 1969

[In millions of dollars, except percent. Excludes Alaska and Hawaii. Farm marketings represent gross receipts from commercial market sales as well as net Commodity Credit Corporation loans]

CROPS	TOTAL MARKET SALES					PERCENT DISTRIBUTION				
	1950	1955	1960	1965	1969	1950	1955	1960	1965	1969
Total.....	28,461	29,490	33,999	39,350	47,431	100.0	100.0	100.0	100.0	100.0
Under price support.....	12,428	13,788	15,242	16,557	18,256	43.7	46.8	44.8	42.1	38.5
Mandatory support.....	11,299	12,461	13,695	14,263	15,392	39.7	42.3	40.3	36.3	32.5
Basic commodities.....	6,563	7,194	7,696	7,693	7,430	23.0	24.4	22.7	19.6	15.7
Cotton.....	2,143	2,324	2,116	2,065	1,093	7.5	7.9	6.2	5.2	2.3
Wheat.....	1,732	1,698	2,105	1,637	1,600	6.1	5.8	6.5	4.2	3.4
Corn.....	1,232	1,607	1,817	2,157	2,703	4.3	5.1	5.4	5.5	5.7
Tobacco.....	1,061	1,225	1,154	1,186	1,289	3.7	4.1	3.4	3.0	2.7
Rice.....	189	270	244	377	437	0.7	0.9	0.7	1.0	0.9
Peanuts.....	206	170	170	271	308	0.7	0.6	0.5	0.7	0.7
Nonbasic commodities <sup>2</sup> .....	4,736	5,267	5,999	6,570	7,902	16.7	17.9	17.6	16.7	16.8
Dairy products.....	3,719	4,217	4,740	5,037	6,143	13.1	14.3	13.9	12.8	13.0
Oats.....	229	246	199	194	205	0.8	0.8	0.6	0.5	0.4
Barley.....	194	238	247	305	250	0.7	0.8	0.7	0.8	0.5
Sorghum grain.....	209	211	372	406	684	0.7	0.7	1.1	1.3	1.3
Sugar beets.....	140	136	190	260	368	0.5	0.5	0.6	0.6	0.8
Others <sup>3</sup> .....	246	219	251	288	362	0.9	0.8	0.7	0.7	0.8
Nonmandatory support <sup>4</sup> .....	1,129	1,327	1,547	2,294	2,864	4.0	4.5	4.6	5.8	6.0
Soybeans.....	596	832	1,125	1,812	2,472	2.1	2.8	3.3	4.6	5.2
Cottonseed.....	200	244	225	265	168	1.0	0.8	0.7	0.7	0.3
Flaxseed.....	130	127	67	88	87	0.5	0.5	0.2	0.2	0.2
Dry beans.....	113	124	130	131	137	0.4	0.4	0.4	0.3	0.3
Not under price support.....	16,033	15,702	18,757	22,793	29,175	56.3	53.2	55.2	57.9	61.5

<sup>1</sup> Revised 1969 total, \$47,229 million; breakdown not available.<sup>2</sup> Under legislation in effect in 1969. Prior to 1959, support was nonmandatory for oats, barley, sorghum grain, and rye. <sup>3</sup> Includes wool, mohair, honey, tung nuts, rye, and sugarcane.<sup>4</sup> Marketing not estimated for naval stores and castor beans.Source: Dept. of Agriculture, Economic Research Service; *The Farm Income Situation*.

# Farm Income

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## No. 933. FARM INCOME—CASH RECEIPTS, 1968 AND 1969, AND PRINCIPAL COMMODITIES IN ORDER OF CASH RECEIPTS, 1969, BY STATES

[In millions of dollars. Cattle include calves; sheep include lambs; and greenhouse includes nursery]

STATE	1968	1969			Govt. payments	Principal commodities in order of cash receipts, 1969		
		Farm marketings		Live-stock and products				
		Total	Crops					
U.S.	47,847.8	47,431.0	18,939.1	28,491.9	3,800.2	Cattle, dairy prod., hogs, corn, soybeans.		
N.E.	756.5	806.5	255.3	551.2	4.9	Broilers, potatoes, eggs, dairy prod.		
Maine	211.8	238.8	80.1	156.8	1.4	Dairy prod., eggs, cattle, greenhouse.		
N.H.	57.1	60.6	14.2	46.4	.6	Dairy prod., cattle, eggs, forest prod.		
Vt.	142.8	150.1	14.0	136.1	1.4	Dairy prod., greenhouse, eggs, cranberries.		
Mass.	161.7	170.4	76.0	94.3	.6	Dairy prod., greenhouse, eggs, potatoes.		
R.I.	20.4	20.5	9.3	11.2	.1	Dairy prod., greenhouse, eggs, tobacco.		
Conn.	162.7	168.1	61.7	106.4	.8	Dairy prod., eggs, tobacco, greenhouse.		
M.A.	2,273.4	2,326.2	685.0	1,641.2	51.1	Dairy prod., cattle, eggs, greenhouse.		
N.Y.	1,064.2	1,089.2	206.7	792.5	21.9	Dairy prod., greenhouse, eggs, tomatoes.		
N.J.	252.5	247.2	143.7	103.5	5.1	Dairy prod., cattle, eggs, greenhouse.		
Pa.	956.7	989.8	244.6	745.2	24.1	Dairy prod., cattle, eggs, greenhouse.		
E.N.C.	7,968.5	7,960.7	3,092.8	4,867.9	567.0	Dairy prod., cattle, hogs, soybeans.		
Ohio	1,318.3	1,270.1	489.1	781.0	108.2	Hogs, corn, soybeans, cattle.		
Ind.	1,472.7	1,499.7	650.0	849.7	140.3	Corn, hogs, soybeans, cattle.		
Ill.	2,752.3	2,759.8	1,355.2	1,404.6	188.2	Dairy prod., cattle, dry beans, corn.		
Mich.	914.8	873.6	384.5	459.1	72.5	Dairy prod., cattle, hogs, corn.		
Wis.	1,510.4	1,557.5	214.0	1,343.5	57.8	Dairy prod., cattle, hogs, corn.		
W.N.C.	12,865.0	12,797.3	3,709.0	9,088.2	1,322.9	Cattle, dairy prod., hogs, corn.		
Minn.	1,999.4	1,985.9	599.6	1,386.3	155.3	Cattle, hogs, corn, soybeans.		
Iowa	3,707.8	3,828.2	923.8	2,904.4	292.3	Cattle, hogs, soybeans, dairy prod.		
Mo.	1,543.5	1,507.8	423.0	1,084.7	155.1	Wheat, cattle, barley, dairy prod.		
N. Dak.	860.6	771.7	476.7	296.0	160.5	Cattle, hogs, wheat, dairy prod.		
S. Dak.	1,046.8	1,033.4	184.8	848.6	94.8	Cattle, hogs, wheat, dairy prod.		
Nebr.	1,942.8	1,966.3	530.8	1,435.5	214.1	Cattle, hogs, corn, wheat.		
Kans.	1,764.1	1,704.0	571.3	1,132.7	257.8	Cattle, wheat, hogs, sorghum grain.		
S.A.	5,222.1	5,443.6	2,869.0	2,574.7	257.6	Broilers, corn, dairy prod., soybeans.		
Del.	127.5	142.2	43.8	98.4	2.2	Broilers, dairy prod., cattle, corn.		
Md.	533.3	379.2	121.4	257.7	7.5	Dairy prod., cattle, tobacco, eggs.		
Va.	538.3	563.9	248.0	316.0	19.7	Cattle, dairy prod., apples, eggs.		
W. Va.	104.3	107.4	26.1	81.3	3.8	Tobacco, broilers, eggs, hogs.		
N.C.	1,300.2	1,394.2	812.8	581.4	67.5	Tobacco, soybeans, eggs, cotton.		
S.C.	427.2	398.0	237.6	160.4	53.5	Broilers, eggs, peanuts, cattle.		
Ga.	1,118.9	1,123.4	417.6	705.8	82.2	Oranges, cattle, dairy prod., tomatoes.		
Fla.	1,252.4	1,335.3	961.7	373.7	21.0			
E.S.C.	3,280.0	3,123.5	1,222.4	1,901.2	344.2	Tobacco, cattle, dairy prod., hogs.		
Ky.	872.4	881.7	391.7	490.0	51.8	Cattle, dairy prod., tobacco, soybeans.		
Tenn.	693.5	677.6	270.5	407.2	73.6	Broilers, cattle, eggs, dairy prod.		
Ala.	744.3	730.6	208.0	527.6	88.9	Cotton, cattle, soybeans, broilers.		
Miss.	909.8	833.6	357.2	476.4	120.9			
W.S.C.	5,835.6	5,383.1	2,303.5	3,079.5	749.7	Soybeans, broilers, rice, cotton.		
Ark.	1,067.3	1,064.8	527.2	537.6	83.7	Rice, cattle, soybeans, sugarcane.		
La.	679.4	1,002.0	347.1	254.9	52.4	Cattle, wheat, dairy prod., peanuts.		
Okla.	954.4	908.3	254.5	653.7	116.7	Cattle, sorghum grain, cotton, dairy prod.		
Tex.	3,134.5	2,808.0	1,174.7	1,633.3	496.9			
Mt.	3,650.5	3,668.9	1,246.6	2,422.3	303.2	Cattle, wheat, barley, sugar beets.		
Mont.	583.6	529.5	176.4	353.1	80.1	Cattle, potatoes, wheat, dairy prod.		
Idaho	586.0	620.3	343.5	276.8	42.8	Cattle, sheep, sugar beets, wheat.		
Wyo.	256.6	257.4	36.8	220.9	14.7	Cattle, dairy prod., wheat, sugar beets.		
Colo.	966.5	906.5	220.8	775.7	66.9	Cattle, cotton, dairy prod., hay.		
N. Mex.	368.3	345.3	97.2	248.1	39.1	Cattle, cotton, lettuce, dairy prod.		
Ariz.	631.9	643.8	316.5	327.3	46.8	Cattle, dairy prod., turkeys, sheep.		
Utah	208.4	212.3	43.5	168.8	10.9	Cattle, dairy prod., hay, sheep.		
Nev.	50.2	63.6	12.1	51.8	1.0			
Pac.	5,996.2	5,921.2	3,555.5	2,365.7	199.6	Wheat, cattle, dairy prod., apples.		
Wash.	866.0	784.9	480.3	304.8	58.3	Cattle, dairy prod., wheat, greenhouse.		
Oreg.	535.4	556.8	290.5	245.8	24.7	Cattle, dairy prod., tomatoes, greenhouse.		
Calif.	4,374.8	4,378.7	2,627.2	1,751.6	104.6	Dairy prod., potatoes, eggs, cattle.		
Alaska	4.2	3.7	.9	2.8	.1	Sugarcane, pineapples, cattle, dairy prod.		
Hawaii	216.8	197.6	156.6	40.9	11.9			

Source: Dept. of Agriculture, Economic Research Service; *The Farm Income Situation*.

## No. 934. COMMODITY CREDIT CORPORATION—SUMMARY: 1955 TO 1969

[Money figures in millions of dollars. As of June 30 or for years ending June 30. The Commodity Credit Corporation (CCC), established in 1933 by Congress, is the financial organization through which farm price support is carried out by loans, purchases, and other operations]

ITEM	1955	1960	1963	1964	1965	1966	1967	1968	1969
Loans made, value.....	2,377	1,507	3,070	2,776	2,144	1,971	1,411	2,052	2,904
Loans outstanding, total value <sup>1</sup> .....	2,137	1,347	2,502	2,815	2,534	2,231	1,536	2,345	3,493
Wheat.....	32	163	161	115	136	111	96	298	583
Sorghum grain.....	1	14	26	32	36	39	30	57	82
Corn.....	470	646	1,044	789	616	451	296	606	656
Cotton.....	1,120	9	751	1,012	775	731	153	61	324
Cost of acquisitions <sup>1,2</sup> .....	2,985	4,020	2,771	2,305	2,005	1,540	1,351	599	930
Wheat.....	1,076	371	464	212	169	55	24	9	96
Sorghum grain.....	160	96	249	129	77	91	7	1	4
Corn.....	586	361	709	541	140	101	111	3	179
Cotton.....	271	2,507	566	760	952	767	742	132	7
Commodities owned, value <sup>1,2</sup> .....	4,572	6,021	4,726	4,338	3,892	3,113	1,858	913	1,244
Wheat.....	2,297	2,452	2,188	1,683	1,207	680	195	149	225
Sorghum grain.....	133	646	696	709	648	467	207	204	206
Corn.....	934	1,700	604	906	595	344	168	162	306
Cotton.....	266	880	719	739	1,123	1,497	1,051	101	27
Commodities owned, quantity:									
Wheat..... mil. bu.	976	1,195	1,082	829	646	340	124	102	163
Sorghum grain..... mil. bu.	92	570	633	638	564	420	104	192	193
Corn..... mil. bu.	581	1,158	492	735	483	280	141	136	270
Cotton..... 1,000 bales	1,662	5,061	4,161	4,440	6,739	9,412	6,838	659	121
Cost of sales and donations <sup>2</sup> .....	1,860	3,261	2,617	2,734	2,487	2,342	2,621	1,565	610
Storage and handling expense <sup>2</sup> .....	235	476	377	365	311	235	151	75	88
Resale loan storage expense <sup>2</sup> .....	20	53	76	79	82	68	44	50	123

<sup>1</sup> Includes amounts for commodities not shown separately.

<sup>2</sup> Price support commodities only. Data comparable for all years.

Source: Dept. of Agriculture, Agricultural Stabilization and Conservation Service; quarterly report, *Commodity Credit Corporation Report of Financial Condition and Operations*.

## No. 935. FARM-RETAIL SPREADS FOR FARM-ORIGINATED FOOD PRODUCTS, BY COMMODITY GROUP: 1957 TO 1969

[In dollars, except as indicated. These estimates are for a market basket of domestic farm-originated food products purchased annually per household in 1960-61 by urban wage-earner and clerical-worker families and single workers living alone. Quantities of food valued do not change from year to year. See *Historical Statistics, Colonial Times to 1957*, series T 352-355, for 1952 market basket totals for all foods]

COMMODITY GROUP AND VALUE	1957-1959, average	1960	1965	1967	1968	1969 (prel.)
All farm food products, <sup>1</sup> retail cost.....	983	991	1,038	1,080	1,118	1,173
Farm value adjusted for byproducts.....	388	383	408	414	435	477
Farm-retail spread.....	605	608	630	668	683	696
Farmer's share of consumer's dollar..... cents.....	39	39	39	38	39	41
Meat products, retail cost.....	285	284	303	317	325	358
Farm value adjusted for byproducts.....	154	148	164	166	172	202
Farm-retail spread.....	131	138	139	151	153	154
Farmer's share of consumer's dollar..... cents.....	54	52	54	52	53	57
Dairy products, retail cost.....	173	178	178	196	202	208
Farm value adjusted for byproducts.....	78	79	80	98	97	101
Farm-retail spread.....	95	99	98	103	105	107
Farmer's share of consumer's dollar..... cents.....	45	44	45	48	48	48
Poultry and eggs, retail cost.....	93	91	85	82	86	95
Farm value.....	56	55	48	43	47	55
Farm-retail spread.....	37	36	37	39	39	40
Farmer's share of consumer's dollar..... cents.....	61	61	57	53	55	57
Bakery and cereal products, retail cost.....	148	152	160	169	170	173
Farm value adjusted for byproducts.....	31	29	33	35	33	33
Farm-retail spread.....	117	123	127	134	137	140
Farmer's share of consumer's dollar..... cents.....	21	19	21	21	19	19
Fruits and vegetables, retail cost.....	203	208	228	229	249	252
Farm value.....	80	82	64	57	68	67
Farm-retail spread.....	153	156	164	172	181	185
Farmer's share of consumer's dollar..... cents.....	25	25	28	25	27	27
Fats and oils, retail cost.....	38	34	37	39	38	38
Farm value adjusted for byproducts.....	11	10	11	11	10	10
Farm-retail spread.....	27	24	26	28	28	28
Farmer's share of consumer's dollar..... cents.....	30	29	31	28	26	27

<sup>1</sup> Includes miscellaneous group not shown separately.

Source: Dept. of Agriculture, Economic Research Service; *Farm-Retail Spreads for Food Products, 1947-64*. ERS-226, April 1965, and *The Marketing and Transportation Situation*, February 1970.

# Farm Facilities

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## No. 936. FARM FACILITIES AND FARM-OPERATOR FAMILIES, 1920 TO 1964, AND BY STATES, 1964

[In thousands, except percent. 1964 data based on reports for a sample of farms. Prior to 1950, excludes Alaska and Hawaii. For composition of regions, see fig. I, p. xii]

YEAR AND STATE	MOTORTRUCKS ON FARMS		AUTOMOBILES ON FARMS		TRACTORS ON FARMS		PERCENT OF FARMS REPORTING AS HAVING—		
	Farms report- ing	Num- ber	Farms report- ing	Num- ber	Farms report- ing	Num- ber	Tele- phone	Home food freezer	Other income, excl. value of farm sales
1920	132	139	1,980	2,146	229	246	38.7	(NA)	(NA)
1930	845	900	3,650	4,135	851	920	34.0	(NA)	(NA)
1940	944	1,047	3,542	4,144	1,410	1,567	25.0	(NA)	(NA)
1950	1,843	2,214	3,393	4,204	2,526	3,612	38.2	12.1	(NA)
1959	2,177	2,834	2,957	3,635	2,680	5,130	65.0	55.8	35.8
<b>1964</b>									
<b>U.S.</b>	<b>2,167</b>	<b>3,030</b>	<b>2,675</b>	<b>3,593</b>	<b>2,520</b>	<b>5,486</b>	<b>76.2</b>	<b>72.5</b>	<b>81.2</b>
North	1,045	1,397	1,373	1,879	1,361	3,290	87.7	77.6	80.3
South	868	1,136	1,030	1,318	907	1,584	61.8	66.3	82.4
West	254	497	272	306	252	611	85.2	75.3	80.1
New England	30	52	37	54	34	76	91.8	67.5	80.0
Maine	9	15	11	15	10	20	88.1	69.5	84.5
New Hampshire	3	6	4	6	4	8	91.9	67.2	84.4
Vermont	6	8	8	12	8	19	80.9	74.1	80.3
Massachusetts	6	11	7	10	6	14	94.6	58.4	75.3
Rhode Island	1	2	1	2	1	2	87.0	50.1	61.9
Connecticut	5	10	6	9	5	13	97.7	68.4	76.2
Middle Atlantic	106	150	146	209	146	356	90.7	78.1	78.1
New York	43	63	61	84	62	157	92.7	77.3	78.3
New Jersey	9	17	10	15	9	26	94.4	69.0	70.0
Pennsylvania	54	70	75	110	75	173	88.7	79.9	79.0
East North Central	396	488	536	739	533	1,304	88.1	79.5	80.7
Ohio	74	91	111	160	100	240	86.4	77.2	84.0
Indiana	78	99	99	137	98	231	88.5	80.0	82.7
Illinois	99	121	125	188	128	335	90.7	81.0	76.3
Michigan	63	80	88	122	88	204	87.0	78.0	86.2
Wisconsin	82	97	113	154	113	285	87.6	80.6	78.2
West North Central	516	709	655	878	649	1,555	86.4	76.6	80.5
Minnesota	91	113	126	175	125	308	87.2	80.1	79.2
Iowa	97	107	149	201	144	362	94.5	79.7	79.5
Missouri	100	123	124	150	120	256	79.7	70.7	83.1
North Dakota	45	82	46	65	47	130	79.7	82.7	81.6
South Dakota	39	67	47	66	47	125	82.5	79.6	74.7
Nebraska	64	93	77	106	76	190	86.8	79.5	80.6
Kansas	80	134	86	115	85	194	87.9	68.7	82.3
South Atlantic	278	367	363	483	319	558	62.3	67.4	81.2
Delaware	3	5	4	6	4	10	88.4	74.8	74.3
Maryland	14	21	18	28	18	45	84.9	75.0	79.0
Virginia	46	59	59	78	56	103	65.5	60.3	81.5
West Virginia	20	24	24	29	23	39	68.6	61.3	91.0
North Carolina	84	101	116	151	102	164	84.0	68.3	77.8
South Carolina	30	39	44	58	33	54	51.4	67.0	80.6
Georgia	57	77	67	90	59	97	68.1	75.6	83.8
Florida	24	41	31	43	24	46	69.9	62.3	82.3
East South Central	265	321	334	423	280	456	55.9	63.7	82.4
Kentucky	74	90	102	131	88	144	61.4	58.0	80.0
Tennessee	74	86	97	122	86	138	65.0	64.7	83.3
Alabama	58	70	64	82	58	79	53.1	67.2	83.9
Mississippi	61	75	71	88	53	95	40.2	66.4	83.0
West South Central	325	448	333	413	308	571	67.5	67.9	83.5
Arkansas	80	81	53	65	54	105	57.1	64.2	79.7
Louisiana	40	51	46	56	36	65	67.6	80.1	81.3
Oklahoma	73	105	71	87	66	116	74.9	65.5	86.5
Texas	152	211	163	205	152	285	68.4	66.7	84.4
Mountain	118	244	119	170	114	290	79.9	77.9	77.8
Montana	25	58	25	35	25	69	78.4	82.2	75.0
Idaho	26	48	27	37	27	66	84.8	80.5	78.6
Wyoming	8	18	8	11	8	23	78.7	81.6	76.1
Colorado	27	55	27	39	26	68	85.2	80.0	76.8
New Mexico	12	23	11	15	9	19	68.6	69.6	78.3
Arizona	5	17	5	11	4	14	75.4	68.4	71.6
Utah	13	20	14	19	13	25	86.1	72.1	86.6
Nevada	2	4	2	3	2	6	70.3	71.3	73.9
Pacific	135	252	154	225	137	322	89.3	73.2	81.9
Washington	36	64	42	60	39	83	89.2	78.3	84.3
Oregon	32	54	36	49	34	76	89.8	80.2	86.3
California	64	128	72	110	62	153	89.9	68.4	78.1
Alaska	(Z)	1	(Z)	(Z)	(Z)	1	55.0	74.1	82.5
Hawaii	3	7	4	6	2	4	79.9	47.8	86.0

NA. Not available. Z Less than 500.

Source: Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1959, Vol. II and 1964, Vol. II.

## Agriculture

No. 937. FARM EXPENDITURES—SELECTED ITEMS, 1949 TO 1964, AND BY STATES, 1964  
 [Expenditures in millions of dollars, except average per farm. Prior to 1950, excludes Alaska and Hawaii. For composition of regions, see fig. I, p. xii]

YEAR AND STATE	FARMS REPORTING		SPECIFIED EXPENDITURES								
	Number (1,000)	Percent of all farms	Total	Average per farm reporting	Livestock and poultry		Seeds, bulbs, and plants	Gasoline and other petroleum fuel and oil <sup>1</sup>	Hired labor <sup>2</sup>	Machine hire and contract work	Fertilizer and fertilizer materials
					Feed	Purchase					
1949	4,782	88.9	10,121	\$2,116	3,024	2,390	543	1,184	2,418	612	(NA)
1954	4,608	98.2	8,190	1,743	3,906	(NA)	(NA)	1,306	2,279	638	(NA)
1959	3,071	99.0	14,035	3,836	4,755	3,857	492	1,554	2,621	805	
<b>1964</b>											
<b>U.S.</b>	<b>3,155</b>	<b>99.9</b>	<b>17,577</b>	<b>5,571</b>	<b>5,512</b>	<b>4,177</b>	<b>661</b>	<b>1,787</b>	<b>2,799</b>	<b>870</b>	<b>1,772</b>
North	1,478	99.9	8,322	5,628	2,715	2,310	366	939	857	303	833
South	1,371	99.9	5,402	3,940	1,758	912	197	563	660	315	695
West	305	99.9	3,853	12,624	1,030	956	97	284	981	252	244
N.E.	42	99.7	366	8,747	178	35	12	23	93	4	23
Maine	13	99.8	111	8,673	56	13	4	6	22	1	10
N.H.	5	99.1	29	6,245	17	3	1	2	6	(Z)	1
Vt.	9	99.8	58	6,287	33	5	1	4	10	1	4
Mass.	8	100.0	76	9,449	31	6	3	5	26		
R.I.	1	100.0	11	9,721	5	1	1	1	3	(Z)	1
Conn.	6	99.7	81	13,452	36	7	3	5	26	1	4
M.A.	160	99.9	971	6,060	413	120	45	81	203	24	82
N.Y.	66	99.9	422	6,346	187	39	21	36	92	11	34
N.J.	11	99.8	129	12,107	46	12	7	9	41	2	12
Pa.	83	99.9	420	5,057	180	69	17	36	70	11	36
E.N.C.	573	100.0	2,678	4,495	771	543	140	329	293	104	400
Ohio	120	100.0	489	3,806	138	96	25	57	61	17	75
Ind.	108	99.9	511	4,727	165	108	24	58	43	19	95
Ill.	133	100.0	872	6,567	231	233	47	112	77	35	136
Mich.	93	99.9	320	3,425	75	63	21	42	60	16	54
Wis.	119	100.0	406	3,414	182	65	23	60	52	17	30
W.N.C.	703	100.0	4,408	6,268	1,351	1,615	171	506	268	170	328
Minn.	131	100.0	603	4,601	207	149	36	88	44	24	55
Iowa	164	100.0	1,808	8,487	444	526	48	107	58	37	88
Mo.	147	99.9	568	3,823	200	135	24	61	46	28	68
N. Dak.	49	100.0	197	4,040	26	44	17	56	25	13	17
S. Dak.	60	100.0	314	6,326	85	121	14	51	20	15	9
Nebr.	80	100.0	797	9,949	230	372	18	71	37	23	46
Kans.	92	100.0	626	6,778	159	268	14	72	38	30	45
S.A.	466	99.9	2,155	4,605	702	287	75	198	436	121	356
Del.	4	100.0	75	17,018	43	12	2	4	7	1	6
Md.	21	100.0	166	7,981	75	26	5	12	25	4	19
Va.	80	99.9	238	9,905	77	37	10	24	46	0	36
W. Va.	34	99.8	55	1,592	23	10	2	5	10	1	89
N.C.	148	99.9	479	3,237	147	50	15	65	94	20	43
S.C.	56	99.8	166	2,050	34	13	6	23	39	7	74
Ga.	83	99.8	499	5,990	213	79	18	38	59	17	85
Fla.	40	99.6	477	11,807	90	40	17	27	156	62	164
E.S.C.	467	99.9	1,184	2,426	396	180	44	115	178	57	39
Ky.	133	99.9	239	1,799	60	44	10	28	40	12	37
Tenn.	133	99.9	243	1,821	78	40	12	27	36	15	47
Ala.	92	99.9	325	3,519	139	53	11	24	39	12	41
Miss.	109	99.8	327	3,002	115	43	11	36	63	18	177
W.S.C.	436	99.9	2,114	4,851	658	463	79	249	347	136	333
Ark.	80	99.9	407	5,101	164	62	17	45	65	20	24
La.	62	99.9	187	2,996	53	18	9	25	46	11	24
Oklahoma	89	99.8	338	3,818	102	106	11	36	33	24	98
Tox.	205	99.9	1,182	5,765	339	277	42	143	203	81	74
Mt.	134	99.9	1,367	10,199	345	479	32	141	233	63	8
Mont.	27	100.0	166	6,138	28	56	4	31	29	9	22
Idaho	30	99.9	220	7,429	47	62	11	26	39	13	3
Wyo.	9	100.0	76	8,397	14	28	1	10	16	3	12
Colo.	30	99.9	402	13,499	114	180	7	31	45	13	7
N. Mex.	14	99.9	122	8,573	34	36	2	14	25	4	18
Ariz.	6	99.9	258	30,899	67	78	5	17	58	16	3
Utah	16	99.8	94	6,001	35	29	2	9	14	3	1
Nev.	2	100.0	29	13,336	6	10	(Z)	3	7	2	169
Pac.	172	99.9	2,487	14,522	694	477	64	142	747	187	28
Wash.	46	99.9	304	6,668	82	68	10	27	77	12	20
Oreg.	40	99.9	209	5,252	55	40	8	20	55	10	110
Calif.	81	99.8	1,875	23,224	542	367	46	89	557	162	
Alaska	(Z)	99.7	3	7,499	1	(Z)	(Z)	(Z)	1	(Z)	(Z)
Hawaii	5	99.7	96	19,863	14	4	6	57	3		11

N. Not available. Z. Less than \$500,000.

<sup>1</sup> For farm business.

<sup>2</sup> Cash payments for farm labor; excludes housework.

Source: Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1959, and 1964, Vol. II.

## No. 938. GROSS FARM PRODUCT IN CURRENT AND CONSTANT DOLLARS—SUMMARY: 1950 TO 1969

[In billions of dollars. Prior to 1960, excludes Alaska and Hawaii. For definition of national income and current and constant dollars, see text, pp. 309-311]

ITEM	1950	1955	1960	1965	1967	1968	1969
CURRENT DOLLARS							
Total value of farm output	32.8	33.1	37.6	43.5	46.6	47.7	51.2
Cash receipts from farm marketings and CCC loans	28.5	29.2	34.1	39.4	42.6	44.2	47.2
Farm products consumed directly in farm households	2.1	1.7	1.2	.8	.7	.7	.7
Change in farm inventories	.8	.5	.2	1.0	.7	.1	.4
Gross rental value of farm homes	1.5	1.7	2.0	2.3	2.5	2.6	2.8
Less: Value of intermediate products consumed	12.7	14.2	17.0	19.6	21.8	22.0	23.4
Plus: Other items	-.1	-.1	-.1	-.2	-.2	-.2	-.3
Equals: Gross farm product	20.0	18.8	20.5	23.7	24.6	25.5	27.5
Less: Capital consumption allowances	2.5	3.5	4.0	4.7	5.4	5.8	6.2
Indirect business taxes	.8	1.0	1.2	1.6	1.9	2.0	2.2
Plus: Government payments to farm landlords	.2	.2	.6	2.2	2.8	3.1	3.4
Equals: National income originating in farming	16.9	14.5	15.9	19.6	20.1	20.7	22.5
CONSTANT (1958) DOLLARS							
Total value of farm output	32.5	35.7	39.2	43.3	45.1	45.1	45.7
Cash receipts from farm marketings and CCC loans	27.9	31.6	35.8	39.7	41.8	42.5	42.8
Farm products consumed directly in farm households	2.3	1.8	1.3	.8	.7	.6	.6
Change in farm inventories	.8	.4	.2	.9	.7	.1	.4
Gross rental value of farm homes	1.6	1.8	1.9	1.9	1.8	1.8	1.8
Less: Value of intermediate products consumed	13.0	14.6	17.2	19.4	21.0	21.1	21.9
Plus: Other items	-.1	-.1	-.1	-.2	-.2	-.2	-.2
Equals: Gross farm product	19.4	20.9	21.9	23.7	23.9	23.8	23.6

Source: Dept. of Commerce, Office of Business Economics; *The National Income and Product Accounts of the United States, 1929-1965* and *Survey of Current Business*, July 1970.

## No. 939. SELECTED FARM INDEXES OF INPUTS: 1950 TO 1969

[1957-59=100]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)
Total	101	102	101	104	107	109	111	112
Farm labor	142	120	92	73	69	68	66	66
Farm real estate	97	100	101	106	107	108	107	107
Mechanical power and machinery	86	99	104	105	110	112	114	115
Fertilizer and liming materials	68	90	111	162	182	203	214	217
Feed, seed, and livestock purchases <sup>1</sup>	72	86	109	127	136	139	143	147
Miscellaneous	85	94	106	120	123	127	130	134

<sup>1</sup> Includes service buildings and improvements on land.

<sup>2</sup> Nonfarm portion of feed, seed, and livestock purchases.

Source: Dept. of Agriculture, Economic Research Service; annual report, *Changes in Farm Production and Efficiency*. In *Economic Report of the President*, February 1970.

## No. 940. LAND AND LIVESTOCK PRODUCTIVITY INDEXES: 1940 TO 1969

[1957-59=100. Excludes Alaska and Hawaii. See *Historical Statistics, Colonial Times to 1957*, series K 102-103, for indexes on a 1947-49 base.]

YEAR	Cropland used <sup>1</sup>	Crop production per acre	Animal units of breeding livestock <sup>2</sup>	Production per animal unit <sup>2</sup>	YEAR	Cropland used <sup>1</sup>	Crop production per acre	Animal units of breeding livestock <sup>2</sup>	Production per animal unit <sup>2</sup>
1940	103	76	95	75	1965	94	122	100	111
1950	106	84	102	86	1967	96	122	98	110
1955	106	91	106	93	1968 (prel.)	95	126	(3)	(3)
1960	99	109	97	105	1969 (prel.)	94	120	(3)	(3)

<sup>1</sup> Harvested acreages plus acreages of crop failure and summer fallow.

<sup>2</sup> Excludes horses and mules. <sup>3</sup> No longer calculated.

Source: Dept. of Agriculture, Economic Research Service; annual report, *Changes in Farm Production and Efficiency*. In annual report, *Agricultural Statistics*.

## No. 941. FARM OUTPUT INDEXES AND ACREAGE OF 59 CROPS: 1940 TO 1969

[Excludes Alaska and Hawaii. See Historical Statistics, Colonial Times to 1957, series K 190-194 and K 254-254, for indexes on a 1947-49 base.]

ITEM	1940	1950	1955	1960	1965	1966	1967	1968	1969
<b>INDEXES, 1957-59=100</b>									
Farm output <sup>1</sup> .....	70	86	96	106	114	113	118	120	121
Per unit of total input.....	72	85	94	105	110	106	108	108	108
Gross production:									
Livestock and products <sup>2</sup> .....	71	88	99	102	111	114	117	118	118
Meat animals.....	72	89	103	103	111	116	120	123	122
Dairy products.....	84	93	99	101	103	100	99	98	98
Poultry and eggs.....	49	78	86	104	124	132	138	135	139
Crops <sup>3</sup> .....	78	89	96	108	115	111	117	120	121
Feed grains.....	66	81	86	109	111	110	124	119	123
Hay and forage.....	86	89	98	103	112	110	115	114	117
Food grains.....	69	86	83	115	117	118	135	141	130
Vegetables.....	83	96	96	102	108	109	112	113	111
Fruits and nuts.....	93	98	99	98	106	108	112	109	131
Sugar crops.....	87	94	86	102	138	137	137	163	175
Cotton.....	102	82	120	116	121	78	60	89	82
Tobacco.....	84	117	127	112	107	100	114	99	104
Oil crops.....	34	71	78	104	153	164	170	192	196
<b>ACREAGE, 59 CROPS (million acres)</b>									
Planted or grown.....	348	353	354	324	304	288	316	308	299
Harvested.....	332	336	332	316	291	288	300	295	286

<sup>1</sup> Measures annual volume of farm production available for eventual human use.

<sup>2</sup> Includes livestock products not shown separately, except horses and mules. Livestock production consists of 3 components: Constant-dollar value of pasture consumed, other feed consumed, and product-added in converting feed and pasture into livestock and products for human use.

<sup>3</sup> Total constant dollar value of all crop production regardless of its final disposition.

Source: Dept. of Agriculture, Economic Research Service; annual report, *Changes in Farm Production and Efficiency*; and Statistical Reporting Service. In annual reports, *Agricultural Statistics* and *Crop Production*.

## No. 942. FARM PRODUCTIVITY—MAN-HOURS AND INDEX OF FARM OUTPUT: 1940 TO 1969

[Man-hours in billions; index, 1957-59=100. Excludes Alaska and Hawaii. See Historical Statistics, Colonial Times to 1957, series W 48-50, for indexes on a 1947-49 base.]

ITEM	1940	1950	1955	1960	1965	1966	1967	1968 (prel.)	1969 (prel.)
Persons supplied per farmworker <sup>1</sup> .....	10.7	15.5	19.5	25.8	37.0	39.6	42.1	43.4	45.3
At home.....	10.3	13.8	17.3	22.3	30.8	33.6	36.0	37.9	39.1
Abroad.....	.4	1.7	2.2	3.5	6.2	6.0	6.1	5.5	6.2
Man-hours of labor required on farms <sup>2</sup> .....	20.5	15.1	12.8	9.8	7.9	7.4	7.3	7.0	6.8
All productive livestock.....	8.1	5.5	4.9	3.8	3.0	2.8	2.7	2.6	2.4
All crops.....	10.4	6.9	6.0	4.6	3.8	3.5	3.5	3.4	3.4
Farm maintenance <sup>3</sup> .....	4.0	2.7	1.9	1.4	1.1	1.1	1.1	1.0	1.0
Index of farm output per man-hour <sup>4</sup> .....	36	61	80	115	156	164	174	182	189
All livestock and products.....	50	68	85	113	159	170	183	192	203
Meat animals.....	76	84	94	108	139	145	152	161	167
Milk cows.....	48	67	82	116	163	175	190	204	218
Poultry.....	34	48	72	124	197	213	226	237	253
All crops.....	37	63	77	115	151	154	162	169	170
Feed grains.....	22	49	67	125	198	200	218	223	237
Hay and forage.....	39	73	83	112	127	129	132	134	136
Food grains.....	27	53	67	126	134	139	134	146	151
Vegetables.....	47	69	85	107	120	120	120	121	122
Fruits and nuts.....	71	88	103	103	131	136	138	135	156
Sugar crops.....	38	55	77	113	128	132	144	162	177
Cotton.....	35	53	81	116	200	211	207	270	241
Tobacco.....	71	82	94	108	118	121	125	122	122
Oil crops.....	23	61	76	109	130	132	129	143	147

<sup>1</sup> Refers to persons supplied farm products; includes farmworkers.

<sup>2</sup> Man-equivalent hours; represents overhead, and time used by average adult males in performing farm operations on crops and livestock. <sup>3</sup> Includes work on horses and mules.

<sup>4</sup> Index of farm output (production) divided by index of man-hours used.

Source: Dept. of Agriculture, Economic Research Service; annual report, *Changes in Farm Production and Efficiency*. In annual report, *Agricultural Statistics*.

No. 943. FARM LABOR—MAN-HOURS PER UNIT OF PRODUCTION, SELECTED CROPS AND LIVESTOCK: 1935-39 TO 1964-68<sup>1</sup>[Excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1957*, series K 87, K 92, and K 97]

ITEM	1935-39	1945-49	1955-59	1964-68 <sup>1</sup>	ITEM	1935-39	1945-49	1955-59	1964-68 <sup>1</sup>
<b>CROPS</b>									
<b>Milk cows:</b>									
Corn for grain:					Man-hours per cow	148	120	109	81
Man-hours per acre <sup>2</sup>	28.1	19.2	9.9	5.9	Milk per cow...lb.	4,401	4,992	6,807	8,519
Yield.....bushels	26.1	36.1	48.7	73.8	Man-hours per cwt.				
Man-hours per 100 bushels.....	108	53	20	8	of milk.....	3.4	2.6	1.7	0.9
Wheat:					Cattle other than milk cows:				
Man-hours per acre <sup>2</sup>	8.8	5.7	3.8	2.9	Man-hours per cwt. of beef produced <sup>4</sup>	4.2	4.0	3.2	2.2
Yield.....bushels	13.2	16.9	22.3	26.6	Hogs: Man-hours per cwt. produced <sup>5</sup>	3.2	3.0	2.4	1.5
Man-hours per 100 bushels.....	87	34	17	11	Chickens (laying flocks and eggs):				
Hay:					Man-hours per 100 layers.....	221	240	175	102
Man-hours per acre <sup>2</sup>	11.3	8.4	6.0	5.6	Rate of lay.....	129	161	200	219
Yield.....short tons	1.24	1.35	1.61	1.88	Man-hours per 100 eggs produced.....	1.7	1.5	0.9	0.5
Man-hours per short ton.....	9.1	6.2	3.7	3.0	Chickens (farm raised):				
Potatoes:					Man-hours per 100 birds.....	30	29	23	14
Man-hours per acre <sup>2</sup>	69.7	68.5	53.1	45.3	Man-hours per cwt. produced <sup>5</sup>	9.0	7.7	6.7	3.7
Yield.....cwt.	70.3	117.8	178.1	206.8	Chickens (broilers):				
Man-hours per short ton.....	20	12	6	4	Man-hours per 100 birds.....	25	16	4	2
Cotton:					Man-hours per cwt. produced <sup>5</sup>	8.5	5.1	1.3	0.6
Man-hours per acre <sup>2</sup>	99	83	66	34	Turkeys: Man-hours per cwt. produced <sup>5</sup>	23.7	13.1	4.4	1.4
Yield.....pounds	226	273	428	504					
Man-hours per bale.....	209	146	74	32					
Tobacco:									
Man-hours per acre <sup>3</sup>	415	460	475	494					
Yield.....pounds	886	1,176	1,641	1,981					
Man-hours per 100 pounds.....	47	39	31	25					

<sup>1</sup> Preliminary.<sup>2</sup> Man-hours per acre harvested, including preharvest work on acreages abandoned, grazed, and turned under.<sup>3</sup> Per acre planted and harvested.<sup>4</sup> Production includes beef produced as a byproduct of the milk cow enterprise.<sup>5</sup> Liveweight production.Source: Dept. of Agriculture, Economic Research Service. In annual report, *Agricultural Statistics*.

## No. 944. SUPPLY AND UTILIZATION OF FARM COMMODITIES: 1947 TO 1969

**Percent distribution.** Prior to 1960, excludes Alaska and Hawaii, except imports and exports include Alaska, Hawaii, and Puerto Rico for all years. "Net" means that commodities used for feed and seed are excluded to avoid double counting. See *Historical Statistics, Colonial Times to 1957*, series K 104-115, for related data]

ITEM	1947-1949	1957-1959	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)
Supply.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Net production <sup>1</sup> .....	91.4	90.2	87.3	93.0	91.1	90.6	84.9	89.8	89.2	89.8
Net imports.....	11.5	11.6	12.4	11.0	11.1	10.8	11.3	11.1	12.1	11.3
Stock change <sup>2</sup> .....	-2.9	-1.8	+0.3	-4.0	-2.2	-1.4	+3.8	-0.9	-1.3	-1.1
Net utilization.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Domestic use.....	91.6	88.3	91.1	90.7	86.4	85.7	85.1	86.3	86.5	87.1
Food:										
Civilian.....	75.1	76.0	75.2	77.1	74.7	73.5	72.8	74.8	75.1	76.0
Military <sup>3</sup> .....	3.3	1.4	1.7	1.7	1.2	1.6	1.6	1.7	1.6	1.6
Net nonfood <sup>4</sup> .....	13.2	10.9	14.2	11.9	10.5	10.6	10.7	9.8	9.8	9.5
Exports and shipments.....	8.4	11.7	8.0	0.3	13.6	14.3	14.0	13.7	13.5	12.9

<sup>1</sup> Meat production includes carcass weight of commercial and farm slaughter; excludes change in live animal inventory.<sup>2</sup> Includes farm and commercial stocks and holdings under Government programs. Minus sign (-) indicates increase in stocks from beginning to end of year; plus sign (+) indicates withdrawals from stocks.<sup>3</sup> Includes civilian feeding in areas occupied by our Armed Forces.<sup>4</sup> Includes some waste and loss at farm level.Source: Dept. of Agriculture, Economic Research Service; *The National Food Situation*.

## Agriculture

## No. 945. SELECTED AGRICULTURAL PRODUCTS—U.S. AND WORLD PRODUCTION AND EXPORTS: 1969

[Cotton, soybean, and grain production for crop year; other commodities and all export data for calendar year and partially estimated, except as indicated. U.S. data exclude Alaska, Hawaii, and Puerto Rico, except for exports]

COMMODITY	UNIT	PRODUCTION			EXPORTS		
		U.S.	World		U.S.	World	
			Total	Percent U.S.		Total	Percent U.S.
Wheat	Million bushels	1,576	11,329	13.9	1,479	11,545	31.0
Corn for grain	Million bushels	4,444	9,616	46.2	1,511	1,080	46.0
Soybeans	Million bushels	1,117	1,487	75.1	311	348	89.4
Rice <sup>2</sup>	1,000 metric tons	3,477	3,186,620	2.6	3,254	3,8,582	29.6
Lard	Million pounds	1,010	8,650	22.1	262	820	31.0
Tallow and greases	Million pounds	5,190	9,290	55.9	1,908	3,550	53.7
Tobacco <sup>4</sup>	Million pounds	1,799	9,894	18.2	577	1,785	32.3
Edible vegetable oils <sup>5</sup>	1,000 short tons	6,255	24,370	25.7	7,235	8,115	28.2
Cotton	1,000 bales <sup>6</sup>	10,080	51,465	19.6	2,484	16,972	14.0

<sup>1</sup> Fiscal year 1968-69. <sup>2</sup> Rough basis. Excludes production data for Communist Asia. <sup>3</sup> Calendar year 1968.

<sup>4</sup> Unmanufactured. <sup>5</sup> Includes palm oils.

<sup>6</sup> Includes oil equivalent of exported oilseeds.

<sup>7</sup> Excludes reexports and exports of oil produced from imported raw materials.

<sup>8</sup> Exports from producing countries. <sup>9</sup> Bales of 480 pounds, net weight.

Source: Dept. of Agriculture, Foreign Agricultural Service. Appears irregularly in *World Agriculture Production and Trade*.

## No. 946. AGRICULTURAL EXPORTS AND IMPORTS—VALUE: 1942 TO 1969

[In millions of dollars, except percent. For years ending June 30. Includes Puerto Rico. Excludes forest products and distilled liquors; includes crude rubber and similar gums (now mainly plantation products)]

YEARLY AVERAGE	EXPORTS		IMPORTS		YEAR	EXPORTS		IMPORTS	
	Total (domestic products)	Per- cent of all	Total	Per- cent of all		Total (domestic products)	Per- cent of all	Total	Per- cent of all
1942-1946	1,976	10	1,045	46	1960	4,517	24	4,010	26
1947-1951	3,468	28	3,378	46	1965	6,097	23	3,986	20
1952-1956	3,290	21	4,209	39	1967	6,771	22	4,453	17
1957-1961	4,383	23	3,878	28	1968	6,311	20	4,656	16
1962-1966	5,812	24	4,770	22	1969 (prel.)	6,740	16	4,931	14

Source: Dept. of Agriculture, Economic Research Service. In annual report, *Agricultural Statistics*.

## No. 947. PRINCIPAL AGRICULTURAL EXPORTS—VALUE: 1941 TO 1969

[In millions of dollars. Includes Puerto Rico. Excludes reexports of foreign products. Includes shipments under foreign aid programs. Prior to 1948, excludes civilian supply shipments]

ITEM	1941-1945, avg.	1946-1950, avg.	1951-1955, avg.	1956-1960, avg.	1961-1965, avg.	1965	1968	1969
Agricultural exports	1,654	3,223	3,314	4,264	5,644	6,229	6,228	5,936
Meats and meat products	373	114	59	104	162	170	160	210
Eggs and dairy products	377	270	117	130	146	192	141	131
Animal fats and oils	109	109	172	182	195	224	149	164
Hides and skins	1	16	37	64	89	109	121	152
Bread grains and preparations	113	896	700	821	1,268	1,214	1,142	866
Coarse grains and preparations, exc. rice	31	225	324	478	841	1,162	958	897
Rice	30	83	119	117	178	244	348	348
Fodders and feeds	4	19	34	65	179	278	372	405
Vegetables and preparations	59	73	83	115	134	151	163	172
Fruits and preparations	84	128	151	245	285	312	275	325
Vegetable oils, fats and waxes, oilseeds, nuts and preparations	46	145	254	499	774	1,029	1,064	1,101
Tobacco, unmanufactured	138	268	315	355	393	383	524	540
Cotton, unmanufactured	152	674	761	778	639	495	466	286
All other	140	203	191	312	362	265	336	339

Source: Dept. of Commerce, Bureau of the Census; *Foreign Commerce and Navigation of the United States*; Quarterly Summary of Foreign Commerce of the United States; FT410, U.S. Exports, Schedule B Commodity and Country, and unpublished data.

**No. 948. AGRICULTURAL EXPORTS UNDER SPECIFIED GOVERNMENT-FINANCED PROGRAMS—VALUE, BY PROGRAM: 1955 TO 1969**

[In millions of dollars, except percent. For years ending June 30. Includes Puerto Rico]

ITEM	1955	1960		1965		1967	1968	1969	
		Total	Percent	Total	Percent			Total	Percent
Agricultural exports <sup>1</sup>	3,144	4,517	100.0	6,097	100.0	6,771	6,311	5,740	100.0
Outside Government programs <sup>1,2</sup>	2,809	3,234	71.6	4,499	73.8	5,463	5,014	4,096	81.8
Under Government programs <sup>1</sup>	835	1,283	28.4	1,598	26.2	1,308	1,297	1,044	18.2
Public Law 480	385	1,116	24.7	1,572	25.8	1,271	1,280	1,038	18.1
Sales for foreign currency	78	824	18.2	1,142	18.8	803	723	344	6.0
Long-term credit sales	—	—	—	158	2.6	178	290	429	7.5
Government-to-Government donations	52	38	0.9	57	0.9	110	100	110	1.9
Donations through voluntary relief agencies	135	105	2.3	183	3.0	157	152	154	2.7
Barter for strategic materials	125	140	3.3	32	0.5	23	6	1	(Z)
Mutual Security (Act for International Development) <sup>3</sup>	450	167	3.7	26	0.4	37	17	6	0.1

<sup>1</sup> Represents zero. <sup>Z</sup> Less than 0.05 percent.

<sup>2</sup> Sources of values for Government financed programs are different from those for total exports; therefore, not fully comparable in regard to valuation, shipping period, etc. Entries for "outside Government programs" are the residuals of the other 2 series. <sup>3</sup> Exports outside specified Government financed programs include, in addition to unassisted commercial transactions, shipments of some commodities with governmental assistance in the form (a) barter for overseas procurement for other U.S. agencies, (b) short-term credits extended by the Commodity Credit Corporation and the Export Import Bank, (c) sales of Government owned commodities below domestic market prices, and (d) export payments in cash or in kind.

<sup>3</sup> Sales for foreign currency, economic aid, and expenditures under development loans.

Source: Dept. of Agriculture, Economic Research Service. In annual report, *Agricultural Statistics*, and monthly report, *Foreign Agricultural Trade of the United States*.

**No. 949. AGRICULTURAL EXPORTS UNDER SPECIFIED GOVERNMENT-FINANCED PROGRAMS—VALUE, BY COMMODITIES: 1966 TO 1969**

[In millions of dollars. For years ending June 30. Includes Puerto Rico. Total exports include food for relief and charity. See table 948 for programs covered]

COMMODITY	1966		1967		1968		1969	
	Total	Under specified programs <sup>1</sup>						
Total	6,676.4	1,388.4	6,771.3	1,308.4	6,311.5	1,297.5	5,740.2	1,044.5
Wheat	1,273.4	755.5	1,181.0	463.5	1,192.5	574.1	787.6	320.3
Wheat flour	128.9	97.4	130.8	66.2	85.0	60.2	105.6	83.3
Bulgur wheat	28.3	27.2	21.5	18.0	22.5	22.5	26.0	25.5
Roasted wheat	—	—	0.9	5.7	5.0	3.6	3.7	3.3
Corn	931.1	41.4	728.3	53.0	736.4	23.4	631.2	13.4
Grain sorghums	294.3	60.9	393.3	129.1	224.1	64.9	128.5	22.6
Barley	93.9	—	54.0	3.6	38.6	—	12.1	1.1
Cornmeal	16.3	13.4	20.7	15.4	16.0	12.1	11.4	7.8
Oatmeal, groats, and rolled oats	1.1	—	3.8	2.2	8.6	6.3	6.9	3.5
Rice	220.1	61.5	305.4	131.3	337.1	135.2	315.5	103.2
Cotton	385.8	74.5	542.3	138.8	474.8	118.6	328.6	98.0
Tobacco, unmanufactured	394.7	39.4	549.7	30.2	493.7	31.3	506.8	32.2
Soybean oil	140.0	84.8	145.8	107.1	117.8	104.4	89.1	77.0
Tallow, edible and inedible	161.1	11.3	166.0	22.9	127.4	20.5	122.0	24.0
Milk, evaporated and condensed	23.4	18.6	23.7	17.8	10.1	5.7	18.9	12.9
Milk, dried, whole	6.7	1.3	4.2	1.0	2.6	—	4.3	—
Milk, nonfat, dried	111.2	68.6	68.5	64.3	66.1	64.2	81.1	74.0
Butter	2.4	.5	.3	—	2.3	—	—	—
Anhydrous milkfat	8.6	1.2	3.1	—	11.9	17.5	18.8	24.8
Infants' and dietetic foods	12.0	2.7	26.2	18.6	31.8	23.3	35.6	30.7
Hides and skins	130.0	5.4	146.0	5.4	110.8	1.8	136.4	.1
Beans, dry edible	24.2	.4	30.3	.4	23.3	2.7	26.9	.6
Other	2,279.9	22.0	2,263.6	13.9	2,175.1	5.1	2,338.0	20.3

<sup>1</sup> Represents zero.

<sup>2</sup> Sources of values for specified Government financed programs are different from those for total exports; therefore, not fully comparable in regard to valuation, shipping period, etc.

Source: Dept. of Agriculture, Economic Research Service. In annual report, *Agricultural Statistics*, and monthly report, *Foreign Agricultural Trade of the United States*.

## No. 950. CROPS—ACREAGE, PRODUCTION, AND VALUE: 1959 AND 1964

CROP	ACREAGE (1,000)		PRODUCTION (1,000 units)			VALUE (mill. dol.)	
	1959	1964	Unit	1959	1964	1959	1964
All crops harvested.....	316,259	291,640	(X)	(X)	(X)	18,846	21,753
All field crops <sup>1</sup> .....	308,187	283,619	(X)	(X)	(X)	16,084	18,378
Corn for all purposes <sup>2</sup> .....	79,616	63,515	(X)	(X)	(X)	4,384	4,639
Sorghum for all purposes.....	17,927	14,966	(X)	(X)	(X)	577	680
All wheat threshed.....	49,567	47,958	Bu.....	1,055,925	1,217,792	1,872	1,672
Oats threshed.....	26,573	18,036	Bu.....	1,001,092	808,397	639	510
Barley threshed.....	14,199	9,805	Bu.....	398,312	362,198	343	338
Rye threshed.....	1,392	1,040	Bu.....	21,809	30,916	22	32
Flaxseed threshed.....	2,848	2,651	Bu.....	19,597	21,789	60	61
Rice threshed.....	1,617	1,815	Lb.....	5,440,334	7,482,412	249	300
Soybeans harvested for beans.....	22,080	29,844	Bu.....	515,628	669,665	1,018	1,780
Soybeans hogged or grazed or cut for silage.....	411	86	(X)	(X)	(NA)	8	4
Cowpeas harvested for dry peas.....	179	79	Bu.....	1,475	646	6	3
Cowpeas hogged or grazed or cut for silage.....	125	34	(X)	(NA)	(NA)	3	1
Soybeans and cowpeas cut for hay.....	434	472	Tons.....	540	628	13	17
Peanuts harvested for nuts.....	1,333	1,347	Lb.....	1,418,428	2,004,045	135	225
Peanut vines or tops saved for hay.....	327	303	Tons.....	197	248	4	5
All dry field and seed beans other than velvetbeans, soybeans, and mungbeans.....	1,414	1,338	Lb.....	1,908,734	1,705,685	138	136
All dry field and seed peas other than cowpeas and Austrian peas.....	344	300	Lb.....	499,346	407,998	20	19
All hay, excl. sorghum for hay and specified annual legumes.....	63,549	65,295	Tons.....	106,500	115,761	2,181	2,744
Alfalfa cut for hay.....	26,107	28,211	Tons.....	59,871	68,381	1,270	1,654
Clover or timothy cut for hay.....	14,040	13,413	Tons.....	22,063	19,567	437	486
Lespedeza cut for hay.....	3,089	2,339	Tons.....	3,763	2,878	80	74
Small grains cut for hay.....	3,551	2,815	Tons.....	3,655	3,063	72	82
Wild hay cut.....	10,474	10,364	Tons.....	8,636	9,163	144	160
Other hay cut.....	5,082	6,345	Tons.....	6,209	8,628	119	197
Silage made from grass or hay crops <sup>3</sup> .....	1,266	1,807	Tons.....	2,391	3,480	58	85
Alfalfa seed harvested.....	673	675	Lb.....	108,737	131,136	31	40
Red clover seed harvested.....	1,141	822	Lb.....	88,393	78,935	23	19
Lespedeza seed harvested.....	422	251	Lb.....	94,706	49,276	9	7
Cotton harvested (lint).....	14,049	13,917	Bales.....	13,914	14,734	2,120	2,390
Cottonseed.....	(X)	(X)	Tons.....	5,745	(NA)	222	(4)
Tobacco harvested.....	1,108	1,025	Lb.....	1,646,513	1,987,527	948	1,168
Sugarcane cut for sugar.....	408	643	Tons.....	16,568	24,614	121	201
Sugarcane or cane for syrup.....	15	7	Gal.....	3,070	1,986	4	3
Sugar beets harvested for sugar.....	912	1,376	Tons.....	16,822	23,202	187	277
Hops harvested.....	33	32	Lb.....	54,602	58,786	27	25
Irish potatoes harvested.....	1,200	1,174	Cwt.....	224,140	221,874	480	761
Sweetpotatoes harvested.....	218	112	Bu.....	29,386	18,405	54	52
All other.....	3,473	3,111	(X)	(X)	(X)	185	203
Vegetables harvested for sale <sup>1</sup> .....	3,491	3,334	(X)	(X)	(X)	740	987
All fruits and nuts and horticultural specialties.....	4,581	4,688	(X)	(X)	(X)	2,022	2,388
Strawberries.....	85	66	Lb.....	418,839	491,234	75	97
Other berries and small fruits.....	106	95	Lb.....	279,987	205,220	38	48
Tree fruits, nuts and grapes (excl. nurseries).....	4,120	4,251	(X)	(X)	(X)	1,295	1,538
Horticultural specialties.....	269	275	(X)	(X)	(X)	615	705

<sup>NA</sup> Not available. <sup>X</sup> Not applicable.<sup>1</sup> Irish and sweet potatoes included with "Field crops," not with "Vegetables." For some crops shown, data were not available for all States; therefore, data shown are for States for which data were available.<sup>2</sup> Excludes sweet corn, popcorn, Egyptian corn, kafir, and milo maize.<sup>3</sup> Silage crops other than corn and sorghums.<sup>4</sup> Cottonseed included with lint.

Source: Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1964, Vol. II.

# Principal Crops

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## No. 951. PRINCIPAL CROPS—ACREAGE, PRODUCTION, AND VALUE: 1946 TO 1969

[Excludes Alaska and Hawaii. For weights of units of measure, see Appendix I. Acreage, production, and yield of all crops revised on basis of census data. See also *Historical Statistics, Colonial Times to 1957*, series K 205-312, for acreage, production, and price data for all crops listed except sorghums, peanuts, and dry beans]

ITEM	1946-1950, avg.	1951-1955, avg.	1956-1960, avg.	1961-1965, avg.	1960	1965	1967	1968	1969 (prel.)
<b>Corn for grain:</b>									
Acreage harvested...1,000 acres..	75,711	70,082	67,001	56,058	71,422	55,332	60,557	55,880	54,573
Production.....mill. bu..	2,808	2,814	3,442	3,758	3,907	4,084	4,700	4,303	4,578
Farm value <sup>1</sup> .....mill. dol..	(NA)	4,187	4,074	4,243	3,929	4,732	4,940	4,763	5,179
Yield per acre.....bu..	37.0	40.2	51.2	66.3	54.7	73.8	78.6	78.6	83.9
Price <sup>2</sup> .....dol. per bu..	1.56	1.40	1.11	1.13	1.00	1.16	1.03	1.08	1.13
<b>Wheat:</b>									
Acreage harvested...1,000 acres..	70,312	60,467	50,032	48,017	51,879	49,560	58,771	55,262	47,555
Production.....mill. bu..	1,185	1,077	1,178	1,214	1,355	1,316	1,522	1,576	1,459
Farm value <sup>1</sup> .....mill. dol..	2,398	2,229	2,140	2,027	2,361	1,775	2,110	1,950	1,786
Yield per acre.....bu..	16.9	17.9	23.4	25.3	26.1	26.5	28.5	30.7	30.7
Price <sup>2</sup> .....dol. per bu..	2.01	2.07	1.83	1.69	1.74	1.35	1.30	1.24	1.23
<b>Oats:</b>									
Acreage harvested...1,000 acres..	39,409	37,872	30,508	21,162	26,588	18,476	16,017	17,533	18,003
Production.....mill. bu..	1,339	1,311	1,209	953	1,153	927	789	939	950
Farm value <sup>1</sup> .....mill. dol..	1,071	950	751	604	693	585	525	569	553
Yield per acre.....bu..	33.9	34.6	39.7	45.2	43.4	50.2	49.3	53.6	52.8
Price <sup>2</sup> .....dol. per bu..	.81	.73	.62	.63	.60	.62	.66	.60	.57
<b>Barley:</b>									
Acreage harvested...1,000 acres..	10,853	10,847	14,243	11,135	18,866	9,144	9,177	9,709	9,388
Production.....mill. bu..	281	303	429	398	429	392	373	423	417
Farm value <sup>1</sup> .....mill. dol..	361	338	380	374	365	395	369	381	370
Yield per acre.....bu..	25.8	27.9	30.1	36.2	31.0	42.9	40.6	43.6	44.4
Price <sup>2</sup> .....dol. per bu..	1.29	1.15	.90	.95	.84	1.02	1.00	.91	.90
<b>Rye:</b>									
Acreage harvested...1,000 acres..	1,791	1,678	1,657	1,055	1,688	1,409	1,071	1,014	1,334
Production.....mill. bu..	22	22	28	33	33	33	24	23	31
Farm value <sup>1</sup> .....mill. dol..	36	30	29	33	30	33	26	24	31
Yield per acre.....bu..	12.2	13.2	16.7	19.7	19.6	22.6	22.6	23.0	23.5
Price <sup>2</sup> .....dol. per bu..	1.63	1.37	1.03	1.01	.88	.97	1.07	1.02	.98
<b>Sugar beets:</b>									
Acreage harvested...1,000 acres..	797	743	883	1,212	957	1,248	1,122	1,410	1,575
Production.....mill. short tons..	11	12	15	21	18	21	19	25	29
Farm value <sup>1</sup> .....mill. dol..	125	135	178	248	190	260	260	350	368
Yield per acre.....short tons..	14.1	15.9	17.5	17.1	17.2	16.8	17.1	18.0	18.1
Price <sup>2</sup> .....dol. per ton..	11.11	11.45	11.54	11.98	11.58	11.95	13.55	13.81	12.90
<b>Rice, rough:</b>									
Acreage harvested...1,000 acres..	1,718	2,106	1,501	1,742	1,695	1,793	1,970	2,353	2,128
Production.....mil. cwt..	37	53	49	68	55	70	89	104	91
Farm value <sup>1</sup> .....mil. dol..	185	268	238	340	248	376	444	621	449
Yield per acre.....lb..	2,161	2,549	3,265	3,892	3,423	4,255	4,587	4,422	4,200
Price <sup>2</sup> .....dol. per cwt..	5.01	5.05	4.76	5.00	4.55	4.93	4.97	5.00	4.92
<b>Sorghums for grain:</b>									
Acreage harvested...1,000 acres..	7,283	8,055	15,284	12,131	15,601	13,029	14,999	13,995	13,463
Production.....mil. bu..	143	170	506	548	620	673	756	740	743
Farm value <sup>1</sup> .....mil. dol..	180	209	471	549	515	688	745	699	796
Yield per acre.....bu..	19.2	18.7	32.4	45.0	39.7	51.6	50.4	52.9	55.2
Price <sup>2</sup> .....dol. per bu..	1.33	1.28	.96	1.01	.84	1.00	.99	.95	1.08
<b>Cotton, excluding linters:</b>									
Acreage harvested...1,000 acres..	21,421	22,678	14,290	14,617	15,309	13,615	7,997	10,160	11,094
Production <sup>4</sup> .....mil. bales <sup>5</sup> ..	12	15	13	15	14	15	7	11	10
Farm value <sup>1</sup> .....mil. dol..	1,975	2,565	2,022	2,312	2,164	2,108	954	1,212	1,076
Yield per acre.....lb..	273	326	434	491	446	527	447	516	436
Price <sup>2</sup> .....cents per lb..	32.72	34.13	31.30	30.99	30.19	28.14	25.59	22.15	* 20.8
<b>Cottonseed:</b>									
Production.....mil. short tons..	5	6	5	6	6	6	3	5	4
Farm value <sup>1</sup> .....mil. dol..	339	367	243	298	250	284	177	234	174
Price <sup>2</sup> .....dol. per ton..	70.96	59.28	45.94	48.70	42.80	46.70	55.20	50.50	40.70

See footnotes at end of table.

## No. 951. PRINCIPAL CROPS—ACREAGE, PRODUCTION, AND VALUE: 1946 TO 1969—Continued

[Excludes Alaska and Hawaii. For weights of units of measure, see Appendix I. Acreage, production, and yield of all crops revised on basis of census data. See also *Historical Statistics, Colonial Times to 1957*, series IC 245-312, for acreage harvested, production, and price data for all crops listed except sorghums, peanuts, and dry beans.]

ITEM	1946-1950, avg.	1951-1955, avg.	1956-1960, avg.	1961-1965, avg.	1960	1965	1967	1968	1969 (proj.)
<b>Hay:</b>									
Acreage harvested...1,000 acres	73,639	74,777	69,666	67,285	67,313	67,084	64,667	62,693	61,838
Production...mil. short tons	99	109	115	120	118	126	126	126	127
Farm value <sup>1</sup> ...mil. dol.	2,174	2,455	2,282	2,679	2,410	2,913	2,897	2,807	2,806
Yield per acre...short tons	1.35	1.46	1.66	1.78	1.76	1.85	1.95	2.06	2.06
Price <sup>2</sup> ...dol. per ton	21.90	22.50	20.90	22.80	21.70	23.20	24.50	23.10	23.20
<b>Beans, dry, edible:<sup>3</sup></b>									
Acreage harvested...1,000 acres	1,747	1,414	1,451	1,414	1,400	1,484	1,211	1,434	1,481
Production...mil. cwt.	17	16	18	18	17	16	15	17	19
Farm value <sup>1</sup> ...mil. dol.	147	128	123	134	124	143	141	142	144
Yield per acre...cwt.	970	1,146	1,215	1,296	1,244	1,109	1,253	1,213	1,209
Price <sup>2</sup> ...dol. per cwt.	8.81	7.96	6.97	7.38	7.14	8.08	9.27	8.20	7.64
<b>Soybeans, for beans:</b>									
Acreage harvested...1,000 acres	11,263	15,709	22,351	20,694	23,055	34,449	30,767	41,104	40,857
Production...mil. bu.	230	313	520	719	555	846	976	1,103	1,117
Farm value <sup>1</sup> ...mil. dol.	581	708	1,075	1,770	1,185	2,151	2,433	2,679	2,580
Yield per acre...bu.	20.4	20.0	23.2	24.2	23.5	24.5	24.5	26.8	27.3
Price <sup>2</sup> ...dol. per bu.	2.56	2.57	2.07	2.46	2.13	2.54	2.49	2.43	2.31
<b>Peanuts, harvested for nuts:</b>									
Acreage harvested...1,000 acres	2,877	1,559	1,442	1,406	1,395	1,435	1,402	1,436	1,447
Production...mil. lb.	2,091	1,429	1,620	1,960	1,718	2,384	2,473	2,543	2,553
Farm value <sup>1</sup> ...mil. dol.	213	160	168	219	172	272	288	302	312
Yield per acre...lb.	742	894	1,124	1,393	1,232	1,661	1,765	1,771	1,764
Price <sup>2</sup> ...dol. per lb.	.10	.11	.10	.11	.10	.11	.11	.12	.12
<b>Irish potatoes:</b>									
Acreage harvested...1,000 acres	1,992	1,420	1,378	1,361	1,386	1,384	1,457	1,378	1,404
Production...mil. cwt.	9250	6217	6252	5272	287	291	305	294	307
Farm value <sup>1</sup> ...mil. dol.	564	479	476	580	513	731	566	653	610
Yield per acre...cwt.	132	153	183	200	185	210	210	210	219
Price <sup>2</sup> ...dol. per cwt.	2.18	2.25	1.90	21.7	2.00	2.53	1.86	2.23	2.13
<b>Tobacco:</b>									
Acreage harvested...1,000 acres	1,718	1,670	1,172	1,126	1,142	977	960	880	921
Production...mil. lb.	2,080	2,217	1,864	2,160	1,944	1,855	1,968	1,710	1,803
Farm value <sup>1</sup> ...mil. dol.	974	1,141	1,075	1,311	1,184	1,207	1,316	1,189	1,282
Yield per acre...lb.	1,215	1,331	1,591	1,921	1,703	1,898	2,050	1,943	1,058
Price <sup>2</sup> ...dol. per lb.	.47	.51	.58	.61	.61	.65	.67	.70	.71

NA. Not available.

<sup>1</sup> Values are based on season average prices; see footnote 2.

<sup>2</sup> Season average price received by farmers. State prices weighted by production to obtain U.S. price prior to 1958, but weighted by sales beginning 1958. For certain years, prices for wheat, rye, rice, corn for grain, grain sorghums, oats, barley, dry edible beans, soybeans, flaxseed, cotton, and cottonseed include an allowance for unredeemed loans and purchase agreement deliveries. See also notes on prices for each crop.

<sup>3</sup> Based on reported price of grain sorghums.

<sup>4</sup> State production figures, which conform with Bureau of the Census annual ginning enumeration with allowance for cross-State ginnings, rounded to thousands and added for U.S. totals.

<sup>5</sup> Bales of 500 pounds, gross weight.

<sup>6</sup> Average price to April 1, 1970.

<sup>7</sup> Prices are for hay sold baled.

<sup>8</sup> Cleaned basis.

<sup>9</sup> Includes some quantities not harvested and/or not marketed on account of economic conditions.

Source: Dept. of Agriculture, Statistical Reporting Service. In annual report, *Agricultural Statistics*, and annual summaries, *Crop Production* and *Crop Values*.

# Principal Crops

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No. 952. PRINCIPAL CROPS—ACREAGE AND VALUE, 1967 TO 1969, AND ORDER OF VALUE, 1969, BY STATES

(Acreage covers 59 major field crops and vegetables; value covers 78 major field crops, vegetables, fruits, and nuts)

State	HARVESTED ACREAGE OF 59 CROPS (1,000)			FARM VALUE OF 78 CROPS (mil. dol.)			Crops in order of value, 1969
	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	
U.S. <sup>1</sup>	300,446	295,099	286,124	21,921	22,610	22,630	Corn, hay, soybeans, wheat.
N.E.:							
Maine	552	543	520	71	88	75	Potatoes, hay, apples, sugar beets.
N.H.	161	151	145	12	11	10	Hay, apples, sweet corn, potatoes.
Vt.	652	616	593	31	30	31	Hay, apples, maple syrup, potatoes.
Mass.	207	196	186	46	48	48	Cranberries, hay, tobacco, apples.
R.I.	27	25	23	5	4	5	Potatoes, hay, tomatoes, sweet corn.
Conn.	187	183	170	47	44	42	Tobacco, hay, apples, potatoes.
M.A.:							
N.Y.	4,546	4,365	4,206	384	370	367	Hay, apples, potatoes, corn.
N.J.	544	516	478	115	110	105	Tomatoes, hay, asparagus, peaches.
Pa.	4,546	4,405	4,322	343	311	336	Hay, corn, potatoes, oats.
E.N.C.:							
Ohio	9,501	9,116	8,628	622	674	646	Corn, soybeans, hay, wheat.
Ind.	11,063	10,631	10,353	774	824	880	Corn, soybeans, hay, wheat.
Ill.	21,302	20,691	20,138	1,826	1,717	1,809	Corn, soybeans, hay, wheat.
Mich.	6,328	6,069	5,716	459	470	460	Corn, hay, dry beans, wheat.
Wis.	9,306	9,193	9,032	529	559	530	Hay, corn, oats, potatoes.
W.N.C.:							
Minn.	18,625	18,183	17,250	942	1,000	967	Corn, soybeans, hay, oats.
Iowa	21,807	20,444	19,743	1,579	1,633	1,619	Corn, soybeans, hay, oats.
Mo.	11,960	11,794	10,672	647	755	643	Corn, soybeans, hay, hweat.
N. Dak.	18,786	18,454	17,488	532	588	583	Wheat, barley, oats, hay.
S. Dak.	14,988	14,357	13,649	421	420	428	Corn, hay, oats, wheat.
Nebr.	16,688	16,725	15,078	702	775	946	Corn, hay, sorghum grain, wheat.
Kans.	20,228	19,252	19,048	702	739	823	Wheat, sorghum grain, hay, corn.
S.A.:							
Del.	527	496	480	46	33	44	Corn, soybeans, potatoes, hay.
Md.	1,518	1,489	1,452	141	129	141	Corn, tobacco, hay, soybeans.
Va.	2,725	2,679	2,620	300	286	311	Tobacco, hay, corn, peanuts.
W. Va.	743	728	718	53	50	49	Hay, apples, corn, tobacco.
N.C.	4,382	4,228	4,093	869	734	842	Tobacco, corn, soybeans, peanuts.
S.C.	2,341	2,324	2,295	288	224	261	Tobacco, soybeans, corn, cotton lint.
Ga.	3,889	3,881	3,817	467	389	407	Peanuts, tobacco, corn, cotton lint.
Fla.	1,408	1,371	1,343	685	798	829	Oranges, tomatoe, grapefruit, sugarcane for sugar and seed.
E.S.C.:							
Ky.	3,784	3,732	3,674	510	506	523	Tobacco, corn, hay, soybeans.
Tenn.	3,954	4,037	4,049	297	301	317	Tobacco, soybeans, hay, cotton lint.
Ala.	2,665	2,726	2,730	192	200	209	Cotton lint, peanuts, soybeans, corn.
Miss.	4,781	4,911	4,818	406	440	368	Cotton lint, soybeans, hay, cottonseed.
W.S.C.:							
Ark.	6,843	7,104	7,066	511	558	536	Soybeans, rice, cotton lint, hay.
La.	3,270	3,547	3,527	389	420	343	Rice, soybeans, sugarcane for sugar and seed, cotton lint.
Okla.	8,945	9,065	8,257	319	340	340	Wheat, hay, sorghum grain, cotton lint.
Tex.	18,062	20,530	19,854	1,250	1,424	1,233	Sorghum grain, cotton lint, rice, hay
Mt.:							
Mont.	8,653	8,244	8,144	290	289	296	Wheat, hay, barley, sugar beets.
Idaho	3,085	3,082	3,927	350	381	388	Potatoes, hay, wheat, sugar beets.
Wyo.	1,888	1,822	1,780	76	72	75	Hay, sugar beets, barley, wheat.
Colo.	5,225	5,513	5,897	284	277	295	Hay, wheat, sugar beets, corn.
N. Mex.	1,061	1,224	1,117	112	112	107	Hay, cotton, lint, sorghum grain, wheat.
Ariz.	1,068	1,128	1,108	265	288	204	Cotton lint, lettuce, hay, sorghum grain.
Utah	1,104	1,095	1,070	81	73	74	Hay, wheat, sugar beets, barley.
Nev.	455	392	467	26	21	29	Hay, alfalfa seed, barley, wheat.
Pac.:							
Wash.	4,554	4,482	4,419	501	462	418	Wheat, hay, apples, potatoes.
Oreg.	2,812	2,646	2,705	254	217	252	Hay, wheat, potatoes, pears.
Calif.	6,719	6,860	6,595	2,090	2,408	2,306	Grapes, hay, tomatoes, cotton lint.

<sup>1</sup> Excludes Alaska and Hawaii.

## Agriculture

## No. 953. CORN FOR GRAIN—PRODUCTION, DOMESTIC DISAPPEARANCE, EXPORTS, IMPORTS, AND STOCKS: 1931 TO 1969

[In millions of bushels. For years beginning October 1. Excludes Alaska, Hawaii, and Puerto Rico, except for exports and imports]

YEARLY AVERAGE OR YEAR	Production	Domestic disappearance <sup>1</sup>	Exports <sup>2</sup>	Imports <sup>2</sup>	Stocks, end of year
1931-1935	2,012	2,015	7	12	247
1936-1940	2,091	1,965	55	22	469
1941-1945	2,653	2,730	22	2	319
1946-1950	2,808	2,596	100	1	561
1951-1955	2,814	2,620	111	1	875
1956-1960	3,442	3,045	227	1	1,643
1961-1965	3,758	3,472	522	1	1,309
1966	3,907	3,887	292	1	2,016
1967	4,084	3,705	687	1	840
1968	4,760	3,789	633	1	1,162
1969 (prel.)	4,393	3,907	538	1	1,113
	4,578	4,017	575	1	1,100

<sup>1</sup> Total disappearance, minus exports of corn and grain equivalent of corn products.

<sup>2</sup> Compiled from reports of the Dept. of Commerce. Includes grain equivalent of corn products.

Source: Dept. of Agriculture, Economic Research Service, *Feed Statistics*, Statistical Bulletin No. 410; *Feed Situation*; and Statistical Reporting Service, *Crop Production*.

## No. 954. CORN FOR GRAIN—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1967 TO 1969

[Pounds per bushel, 56]

STATE	ACREAGE HARVESTED			YIELD PER ACRE			PRODUCTION			PRICE <sup>1</sup>		FARM VALUE	
	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1968	1969 (prel.)	1968	1969 (prel.)
	1,000 acres 60,557	1,000 acres 55,880	1,000 acres 54,573	Bu. 78.6	Bu. 78.6	Bu. 83.9	Mil. bu. 4,760	Mil. bu. 4,393	Mil. bu. 4,578	Dol. per bu. 1.08	Dol. per bu. 1.13	Mil. dol. 4,763	Mil. dol. 5,179
Total...	860	688	610	44.0	32.0	28.0	38	22	17	1.18	1.37	26	24
Ala.	220	185	194	84.0	95.0	92.0	18	18	18	1.36	1.44	24	20
Calif.	250	267	283	80.0	84.0	91.0	21	22	26	1.15	1.21	26	31
Colo.	211	177	170	73.0	49.0	78.0	15	9	13	1.14	1.23	10	16
Del.	449	373	358	60.0	42.0	39.0	22	16	14	1.19	1.28	19	18
Fla.	1,582	1,455	1,426	58.0	40.0	33.0	89	58	47	1.17	1.36	68	64
Ill.	10,788	10,088	9,763	100.0	89.0	98.0	1,079	898	987	1.10	1.14	988	1,091
Ind.	5,382	4,700	4,646	82.0	85.0	96.0	441	407	446	1.05	1.10	428	491
Iowa	11,145	9,808	9,416	88.5	93.0	98.0	986	912	923	1.07	1.10	976	1,015
Kans.	1,060	1,134	1,236	68.0	75.0	74.0	72	85	91	1.06	1.15	90	105
Ky.	1,168	1,051	998	80.0	66.0	77.0	93	69	77	1.17	1.25	81	96
Md.	526	484	479	82.0	66.0	81.0	43	32	39	1.10	1.22	35	47
Mich.	1,407	1,266	1,266	65.0	76.0	74.0	91	96	94	1.08	1.11	99	104
Minn.	4,943	4,548	4,184	72.0	81.0	85.0	356	368	356	1.02	.99	376	352
Miss.	420	370	318	42.0	30.0	31.0	18	14	10	1.24	1.36	18	13
Mo.	2,929	2,958	2,603	69.0	83.0	70.0	202	246	182	1.00	1.20	268	219
Nebr.	4,510	4,239	4,663	74.0	74.0	93.0	334	314	434	1.09	1.10	342	477
N.Y.	276	235	247	77.0	72.0	75.0	21	17	19	1.20	1.31	20	24
N.C.	1,381	1,348	1,321	76.0	60.0	68.0	105	81	90	1.12	1.28	91	115
Ohio	3,240	2,884	2,740	77.0	84.0	85.0	249	242	233	1.07	1.17	259	272
Pa.	921	810	907	88.0	70.0	84.0	81	57	76	1.25	1.29	71	68
S.C.	301	387	402	57.0	45.0	47.0	22	17	19	1.16	1.31	20	25
S. Dak.	2,448	2,399	2,447	38.0	46.0	57.0	93	110	139	1.04	1.02	115	142
Tenn.	783	658	605	57.0	47.0	46.0	45	31	28	1.18	1.33	36	37
Tex.	491	501	571	38.0	52.0	44.0	19	20	25	1.15	1.30	30	33
Va.	484	436	432	73.0	71.0	77.0	35	31	33	1.12	1.27	35	42
Wis.	1,703	1,754	1,684	80.0	93.0	83.0	136	103	140	1.08	1.14	176	169
Other...	630	587	595	53.1	53.5	55.7	33	32	32	(N/A)	(N/A)	36	43

NA. Not available.

<sup>1</sup> Season average price received by farmers. State prices weighted by sales to obtain U.S. prices. Includes an allowance for unredeemed loan and purchase agreement deliveries valued at average rate.

Source: Dept. of Agriculture, Statistical Reporting Service; annual summaries, *Crop Production* and *Crop Values*.

## No. 955. WHEAT—SUPPLY AND DISAPPEARANCE: 1946 TO 1969

[In millions of 60-pound bushels. Years begin July 1. Excludes Alaska, Hawaii, and Puerto Rico, except exports and imports. See *Historical Statistics, Colonial Times to 1957*, series K 272-273, for stocks on and off farms]

ITEM	1946-1950, avg.	1951-1955, avg.	1956-1960, avg.	1961-1965, avg.	1965	1967	1968	1969 (prel.)
Supply								
Stocks, July 1, total	1,410	1,739	2,273	2,346	2,134	1,948	2,117	2,279
On farms	222	646	1,086	1,129	817	426	589	819
Interior mills, elevator and warehouse stocks	62	73	78	108	132	146	230	328
Commodity Credit Corp. <sup>2</sup>	157	521	920	982	674	279	308	490
New crop	4	53	88	39	11	1	1	1
Imports <sup>3</sup>	1,185	1,078	1,179	1,214	316	1,522	1,576	1,459
Old-crop carryover <sup>4</sup>	3	15	8	3	1	1	1	1
Disappearance	1,128	966	1,111	1,392	1,599	1,409	1,298	1,380
Food	480	474	481	506	515	519	520	525
Seed	88	76	62	62	62	72	62	55
Military procurement	117	12	7	(*)	(*)	(*)	(*)	(*)
Feed <sup>5</sup> and industry	137	75	44	82	155	57	173	200
Exports and shipments	306	328	517	762	867	761	544	600
Old-crop carryover <sup>6</sup>	282	773	1,162	954	535	539	819	899

<sup>1</sup> Includes "Terminal market" and "Merchant mills."

<sup>2</sup> Owned or controlled by CCC in storage or in transit to ports; other CCC wheat included in other categories.

<sup>3</sup> Imports comprise full duty wheat, wheat imported for feed, and dutiable flour and other wheat products in terms of wheat. Compiled from reports of the Bureau of the Census.

<sup>4</sup> Beginning 1961, military procurement and shipments included in "Food."

<sup>5</sup> Residual figure, assumed to roughly approximate wheat used for feed.

<sup>6</sup> For individual items, see "Stocks," above.

Source: Dept. of Agriculture, Economic Research Service; *Wheat Situation*.

No. 956. WHEAT—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1967 TO 1969  
(Pounds per bushel, 60)

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (bushels)			PRODUCTION (mil. bushels)			PRICE <sup>1</sup> (dol. per bu.)		FARM VALUE (mil. dol.)	
	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1968	1969 (prel.)	1968	1969 (prel.)
	Total	58,771	55,262	47,555	25.9	28.5	30.7	1,522.4	1,576.3	1,468.9	1.24	1.23	1,950.5
Ala.	112	111	79	24.0	25.0	28.5	2.7	2.8	2.3	1.20	1.21	3.3	2.7
Ariz.	50	52	73	49.0	52.0	62.0	2.5	2.7	4.5	1.32	1.49	3.6	6.7
Ark.	661	568	301	28.5	25.0	30.0	18.8	14.2	9.0	1.16	1.15	16.5	10.4
Calif.	350	379	355	33.5	33.6	34.0	11.7	12.7	12.1	1.36	1.45	17.3	17.5
Colo.	1,945	2,019	2,145	19.6	20.0	21.0	38.0	40.4	45.0	1.12	1.10	45.2	49.6
Ga.	130	114	86	26.0	28.0	34.0	3.4	3.2	2.9	1.21	1.27	3.9	3.7
Idaho	1,300	1,230	1,051	44.3	45.6	45.7	57.6	56.4	48.0	1.15	1.24	64.8	50.6
Ill.	1,845	1,384	1,301	39.0	36.0	37.0	72.0	49.8	48.1	1.21	1.18	60.3	56.8
Ind.	1,237	977	899	37.0	35.0	39.0	45.8	34.2	35.1	1.12	1.14	38.3	40.0
Kans.	11,081	9,751	9,849	20.0	26.0	31.0	221.6	256.5	305.3	1.22	1.16	309.3	354.2
Ky.	231	208	183	34.0	30.0	34.0	7.9	6.2	6.2	1.22	1.20	7.0	7.5
La.	100	96	88	26.0	22.0	23.0	2.6	2.1	0.9	1.20	1.17	2.5	1.0
Md.	153	182	117	39.0	32.0	39.0	6.0	4.2	4.6	1.14	1.21	4.8	5.5
Mich.	1,120	885	628	36.0	36.0	40.0	40.3	31.9	25.1	1.07	1.13	34.1	28.4
Minn.	1,052	1,031	888	32.1	32.9	29.4	33.8	34.0	24.6	1.39	1.44	47.2	35.5
Miss.	462	416	125	30.0	27.0	31.0	13.9	11.2	8.9	1.14	1.15	12.8	4.5
Mo.	1,582	1,278	1,055	32.0	33.0	32.0	63.8	42.2	33.1	1.19	1.16	38.4	38.4
Mont.	4,734	4,550	3,645	25.2	27.7	26.6	119.1	125.9	96.8	1.16	1.21	146.0	116.8
Nebr.	3,225	3,159	2,717	28.5	32.0	31.5	88.1	101.1	85.6	1.17	1.13	118.3	96.7
N. Mex.	141	305	159	28.0	25.0	32.0	3.9	7.6	5.1	1.25	1.30	9.5	6.6
N.Y.	250	212	182	40.0	40.0	40.0	10.0	8.5	7.3	1.17	1.19	9.9	8.7
N.C.	239	220	198	31.0	39.0	42.0	7.4	8.6	8.3	1.22	1.21	10.5	10.1
N. Dak.	7,042	7,808	6,782	22.6	26.0	30.0	180.3	212.8	203.6	1.39	1.37	295.7	278.7
Ohio	1,514	1,226	1,067	34.0	37.0	37.0	51.5	45.4	39.5	1.14	1.16	51.7	45.8
Okla.	5,217	5,321	4,160	17.0	23.0	28.5	88.7	122.4	118.3	1.25	1.20	153.0	141.9
Greg.	1,045	982	788	31.5	30.7	38.1	33.0	30.2	30.0	1.28	1.27	38.6	38.1
Pa.	480	394	327	36.0	32.0	35.5	17.3	12.6	11.6	1.14	1.26	14.4	14.6
S.C.	112	104	82	27.0	29.0	37.0	3.0	3.0	3.0	1.24	1.24	3.7	3.8
S. Dak.	2,637	2,418	1,963	28.0	27.2	21.9	73.9	65.7	42.0	1.31	1.34	86.1	57.7
Tenn.	294	273	224	29.0	27.0	32.0	8.5	7.4	7.2	1.24	1.25	9.1	9.0
Tex.	8,926	8,825	2,869	16.0	22.0	24.0	53.2	84.2	68.9	1.26	1.24	100.0	85.4
Utah	279	261	229	31.0	28.7	26.5	8.6	7.5	6.1	1.26	1.30	9.4	7.9
Va.	194	160	157	35.0	34.0	43.0	6.8	5.7	6.8	1.20	1.23	6.8	8.3
Wash.	2,922	2,768	2,462	40.5	39.4	38.7	118.5	109.0	95.2	1.29	1.26	140.6	120.1
Wyo.	310	281	242	27.6	30.3	20.2	8.6	8.5	4.9	1.04	1.08	8.9	5.3
Other	279	261	209	35.1	33.3	34.4	9.8	8.5	7.1	(N/A)	(N/A)	10.5	8.7

NA Not available. <sup>1</sup> See footnote 1, table 954.

Source: Dept. of Agriculture, Statistical Reporting Service; annual summaries, *Crop Production* and *Crop Values*.

No. 957. SORGHUM FOR GRAIN—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1967 TO 1969

[Pounds per bushel, 56]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (bushels)			PRODUCTION (mil. bushels)			PRICE <sup>1</sup> (dol. per bu.)		FARM VALUE (mill. dol.)	
	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1968	1969 (prel.)	1968	1969 (prel.)
Total.....	14,999	13,995	13,463	50.4	52.9	55.2	756	740	743	0.95	1.08	699	796
Ariz.....	246	231	199	81.0	79.0	78.0	20	18	16	1.14	1.33	21	21
Ark.....	47	50	72	43.0	41.0	40.0	2	2	3	1.00	1.04	2	3
Calif.....	424	360	421	65.0	70.0	69.0	28	26	29	1.22	1.32	31	38
Colo.....	345	324	305	36.0	30.0	36.0	12	12	11	.99	1.07	12	12
Iowa.....	47	48	36	65.0	70.0	82.0	3	3	3	.91	1.01	3	3
Kans.....	3,248	3,475	3,206	46.0	47.0	56.0	149	163	183	.91	1.02	149	187
Mo.....	248	216	214	58.0	66.0	64.0	14	14	14	.89	1.03	13	14
Nehr.....	2,193	1,754	1,508	56.5	58.0	76.0	124	102	115	.88	.97	90	111
N. Mex.....	314	279	301	61.0	58.0	58.0	19	16	17	.99	1.18	16	20
N.C.....	46	45	49	50.0	52.0	56.0	2	2	3	1.02	1.09	2	3
Oklahoma.....	679	638	642	38.0	41.0	47.0	26	26	25	.95	1.10	25	28
S. Dak.....	317	244	207	24.0	34.0	44.0	8	8	9	.88	.93	7	8
Tex.....	6,735	6,196	6,196	51.0	55.0	50.0	343	341	310	.95	1.10	324	341
Other.....	110	135	147	44.6	45.2	44.6	5	6	7	(NA)	(NA)	6	7

NA. Not available. <sup>1</sup> See footnote 1, table 954.

No. 958. RICE, ROUGH—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1967 TO 1969

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (pounds)			PRODUCTION (mil. cwt.)			PRICE <sup>1</sup> (dol. per cwt.)		FARM VALUE (mill. dol.)	
	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1968	1969 (prel.)	1968	1969 (prel.)
Total.....	1,870	2,353	2,128	4,537	4,422	4,290	89.4	104.1	91.3	5.00	4.92	520.9	449.2
Ark.....	477	572	515	4,550	4,300	4,800	21.7	24.6	24.7	5.07	5.10	124.7	126.1
Calif.....	360	432	380	4,900	5,325	5,500	17.6	23.0	21.4	5.15	5.00	118.5	107.0
La.....	565	679	611	3,900	3,850	3,400	22.0	26.1	20.8	4.83	4.75	126.3	98.7
Miss.....	55	67	60	4,300	4,300	4,200	2.4	2.9	2.5	5.20	5.30	15.0	13.4
Mo.....	5	6	5	4,800	4,500	4,600	0.2	0.3	0.2	5.08	5.10	1.5	1.3
Tex.....	608	597	648	5,000	4,550	3,950	25.4	27.2	21.6	4.97	4.75	135.0	102.8

<sup>1</sup> See footnote 1, table 954.

Source of tables 957 and 958: Dept. of Agriculture, Statistical Reporting Service; annual summaries, *Crop Production* and *Crop Values*.

No. 959. RICE, ROUGH EQUIVALENT—PRODUCTION, DOMESTIC DISAPPEARANCE, EXPORTS, IMPORTS, AND STOCKS: 1952 TO 1969

[In thousands of hundredweight. For years beginning August 1]

YEARLY AVERAGE OR YEAR	Production	Domestic disappearance <sup>1</sup>	Exports <sup>1,2</sup>	Imports <sup>1,2</sup>	Stocks, end of year
1952-1956.....	54,116	25,899	23,605	282	18,067
1957-1961.....	50,026	27,107	25,185	373	12,278
1962-1966.....	74,156	30,113	42,961	243	7,939
1960.....	54,591	26,920	20,474	288	10,080
1965.....	76,281	30,846	48,315	680	8,239
1966.....	85,020	31,923	51,588	8	8,511
1967.....	89,379	33,674	56,881	7	6,784
1968 (prel.).....	104,075	35,621	35,621	10	10,213
1969 estimate.....	91,303	(NA)	(NA)	(NA)	(NA)

NA. Not available. <sup>1</sup> Includes Puerto Rico. <sup>2</sup> Compiled from reports of the Dept. of Commerce.

<sup>3</sup> Adjusted on basis of bills of lading presented to the Dept. of Agriculture for payment.

Source: Dept. of Agriculture, Economic Research Service; annual report, *Rice Situation*.

# Potatoes—Cotton

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## No. 960. IRISH POTATOES—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1967 TO 1969

[Excludes Alaska and Hawaii]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (cwt.)			PRODUCTION (Mil. cwt.)			PRICE <sup>1</sup> (dol. per cwt.)		FARM VALUE (mill. dol.)	
	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1968	1969 (prel.)	1968	1969 (prel.)
Total.....	1,457	1,378	1,404	210	214	219	305	294	307	2.23	2.13	653	616
Ariz.....	11	10	13	250	230	230	3	2	3	3.15	2.90	7	9
Calif.....	110	91	94	302	323	309	23	29	29	2.83	2.46	84	71
Colo.....	46	48	50	250	236	232	12	11	12	1.67	1.81	19	21
Fla.....	36	42	40	132	162	180	5	7	7	3.40	3.10	23	22
Idaho.....	304	294	310	210	202	216	64	60	67	2.35	1.79	140	120
Maine.....	158	156	156	238	235	225	38	36	35	1.85	1.60	67	56
Mich.....	44	40	40	204	211	223	9	8	9	2.22	2.48	19	22
Minn.....	105	94	98	128	147	158	13	14	15	1.03	1.54	23	24
N.J.....	18	14	13	260	255	250	4	4	3	2.10	2.43	8	8
N.Y.....	75	70	69	238	249	247	18	17	17	2.31	2.33	40	40
N. Dak.....	120	108	110	119	145	140	14	16	15	1.85	1.30	21	20
Ohio.....	16	16	14	198	206	181	3	3	3	2.20	2.36	7	6
Oreg.....	49	47	49	270	258	268	13	12	13	1.95	1.97	23	26
Pa.....	38	37	36	240	205	220	9	8	8	2.60	2.70	20	21
Tex.....	30	27	27	147	165	163	4	4	4	3.32	3.49	15	15
Vt.....	31	31	32	181	139	124	4	4	4	2.53	2.55	11	10
Wash.....	64	64	72	345	378	408	22	24	24	1.67	1.47	40	43
Wis.....	57	54	53	232	224	284	13	12	12	2.63	2.52	32	31
Other.....	147	136	128	159	158	161	24	23	22	(NA)	(NA)	54	51

NA. Not available.

<sup>1</sup> Season average price received by farmers. State prices weighted by sales to obtain U.S. prices.

Source: Dept. of Agriculture, Statistical Reporting Service; annual summaries, *Crop Production* and *Crop Values*.

## No. 961. COTTON—PRODUCTION, PRICES, CONSUMPTION, TRADE, AND CARRYOVER: 1941 TO 1969

[In thousands of bales, except price. For years ending July 31, except as noted. Excludes linters. Excludes Alaska, Hawaii, and Puerto Rico, except for exports and imports. Production figures relate to crop of preceding calendar year and are compiled from reports of individual ginners. Price per pound is average price received by growers. For stocks, see *Historical Statistics, Colonial Times to 1957*, series K 304.]

YEARLY AVERAGE OR YEAR	PRODUCTION		Average price per pound of upland cotton <sup>1</sup> (cents)	Consumption <sup>2</sup> (running bales)	Net exports of domestic cotton (running bales)	Net imports (equivalent 500-pound bales)	Carry-over (running bales)
	Running bales (counting round as half bales)	Equivalent 500-pound bales, gross weight					
1941-1945.....	11,640	11,957	17.3	10,301	1,372	185	11,074
1946-1950.....	11,875	12,102	29.4	9,038	3,929	252	5,014
1951-1955.....	13,997	14,093	35.2	9,339	3,977	152	6,321
1956-1960.....	12,905	13,013	31.8	8,702	5,100	137	10,207
1961-1965.....	14,770	14,795	31.0	8,688	4,924	142	10,589
1960.....	14,516	14,558	30.2	9,017	7,182	136	7,559
1965.....	14,933	14,973	28.0	9,171	4,060	118	14,291
1966.....	9,562	9,575	20.6	9,497	3,000	120	16,862
1967.....	7,439	7,458	26.4	9,485	4,669	105	12,533
1968.....	10,916	10,948	22.2	8,082	4,208	145	6,448
1969 (prel.).....	8,048	10,014	21.3	8,242	2,731	68	6,521

<sup>1</sup> Data from Dept. of Agriculture, Statistical Reporting Service. <sup>2</sup> Beginning 1951, adjusted to cotton season.

Source: Dept. of Commerce, Bureau of the Census (except as noted); annual report, *Cotton Production and Distribution* through 1964; thereafter, *Current Industrial Reports*, Series M22P and *Cotton Ginnings*, Series A10.

**No. 962. COTTON AND COTTONSEED—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1967 TO 1969**

[Cotton production excludes linters. Values shown are for marketing season or crop year and should not be confused with calendar year income]

YEARLY AVERAGE OR YEAR	COTTON					COTTONSEED			Total farm value
	Acres harvested	Bales (600 pounds gross)	Farm value	Yield per acre	Farm price per pound <sup>1</sup>	Quantity	Farm value	Farm price per ton	
<b>Total:</b>	<b>1,000</b>	<b>1,000</b>	<b>\$1,000</b>			<b>1,000 short tons</b>	<b>\$1,000</b>	<b>Dollars</b>	<b>\$1,000</b>
1967-----	7,997	7,458	963,820	447	25.6	3,210	177,406	55.20	1,131,226
1968-----	10,160	10,948	1,212,021	516	22.2	4,040	234,492	50.50	1,446,513
1969 (prel.)	11,075	10,015	1,088,964	433	20.8	4,186	172,030	41.10	1,210,094
<b>Alabama:</b>									
1967-----	340	200	25,798	282	25.7	86	4,438	51.60	30,231
1968-----	525	307	46,807	362	23.6	166	7,908	48.00	54,775
1969 (prel.)	545	461	48,410	405	21.0	191	7,678	40.20	56,088
<b>Arizona:</b>									
1967-----	245	454	67,476	887	29.8	194	10,282	53.00	77,788
1968-----	298	734	86,276	1,180	23.6	307	16,118	52.50	102,394
1969 (prel.)	310	634	70,028	970	22.2	263	10,467	39.80	80,495
<b>Arkansas:</b>									
1967-----	715	497	71,960	333	29.0	216	12,010	55.60	88,970
1968-----	980	1,028	123,672	502	24.1	435	21,750	50.00	145,422
1969 (prel.)	1,055	1,140	122,577	518	21.5	477	20,082	42.10	142,680
<b>California:</b>									
1967-----	588	1,040	166,435	847	32.0	442	23,426	53.00	189,861
1968-----	687	1,573	186,841	1,097	23.8	685	34,250	50.00	221,091
1969 (prel.)	708	1,315	148,652	893	22.6	565	21,300	37.70	169,052
<b>Georgia:</b>									
1967-----	207	228	29,386	408	25.8	98	5,057	51.60	34,443
1968-----	395	266	29,150	322	22.0	111	5,539	49.90	34,689
1969 (prel.)	385	282	27,258	351	19.3	117	4,586	39.20	31,844
<b>Louisiana:</b>									
1967-----	330	428	61,130	621	28.6	182	10,010	55.00	71,140
1968-----	410	545	61,838	636	22.7	229	11,587	50.60	73,425
1969 (prel.)	420	483	53,363	551	22.1	200	8,280	41.40	61,643
<b>Mississippi:</b>									
1967-----	890	1,054	149,565	567	28.4	460	26,818	58.30	176,383
1968-----	1,105	1,522	174,401	680	22.0	645	33,476	51.90	207,877
1969 (prel.)	1,185	1,328	144,092	537	21.7	540	23,717	43.20	167,869
<b>Missouri:</b>									
1967-----	90	50	8,676	314	29.4	26	1,378	53.00	10,054
1968-----	190	197	25,777	495	26.2	84	4,099	48.80	20,876
1969 (prel.)	305	326	35,480	511	21.8	137	5,247	38.30	40,727
<b>New Mexico:</b>									
1967-----	122	157	24,935	610	31.8	68	4,053	59.60	28,988
1968-----	151	176	21,656	557	24.7	74	3,015	52.90	25,571
1969 (prel.)	146	157	19,350	517	24.7	64	2,912	45.50	22,271
<b>North Carolina:</b>									
1967-----	75	44	6,310	277	29.0	19	980	51.60	7,299
1968-----	189	123	14,126	310	23.0	51	2,514	49.30	16,640
1969 (prel.)	166	100	10,697	287	21.3	41	1,689	40.70	12,266
<b>Oklahoma:</b>									
1967-----	370	194	19,633	251	20.3	84	4,771	56.80	24,404
1968-----	380	264	24,897	333	18.8	112	5,499	49.10	30,366
1969 (prel.)	405	279	25,934	288	18.6	117	5,300	45.30	31,234
<b>South Carolina:</b>									
1967-----	190	179	26,640	440	29.8	77	4,060	52.60	30,690
1968-----	340	251	30,650	352	24.4	105	5,260	50.00	35,900
1969 (prel.)	287	205	21,076	342	21.1	85	3,434	40.40	25,110
<b>Tennessee:</b>									
1967-----	236	145	20,614	295	28.4	63	3,471	55.10	24,085
1968-----	360	325	30,140	432	24.1	137	6,823	49.80	45,972
1969 (prel.)	400	422	44,752	505	21.2	176	7,058	40.10	51,810
<b>Texas:</b>									
1967-----	3,528	2,767	273,546	376	19.8	1,100	66,402	55.80	339,948
1968-----	4,125	3,525	344,142	410	19.5	1,490	76,245	50.50	419,387
1969 (prel.)	4,675	2,862	264,591	294	18.5	1,195	49,951	41.80	314,542
<b>Other States:</b>									
1967-----	14	12	1,712	410	28.8	5	260	50.30	1,972
1968-----	25	22	2,030	422	24.1	9	450	49.10	3,080
1969 (prel.)	26	21	2,105	390	21.0	0	349	39.80	2,542

<sup>1</sup> Includes an allowance for unredeemed loans. For 1969, average price to Apr. 1, 1970.

Source: Dept. of Agriculture, Statistical Reporting Service; annual summary, *Crop Production*.

**No. 963. TOBACCO—PRODUCTION, DISAPPEARANCE, EXPORTS, IMPORTS, AND STOCKS: 1941 TO 1969**

[In millions of pounds. Flue-cured and cigar wrapper, crop year, July-June; all other types, October-September. Excludes Alaska, Hawaii, and Puerto Rico, except for exports and imports. Farm-sales-weight basis]

ITEM	1941-1945	1946-1950	1951-1955	1956-1960	1961-1965	1965	1967	1968	1969
Production	1,604	2,080	2,217	1,864	2,161	1,855	1,968	1,710	1,803
Domestic disappearance <sup>1</sup>	1,283	1,411	1,471	1,408	1,468	1,462	1,372	1,351	(NA)
Exports <sup>2</sup>	432	531	552	538	563	538	648	623	(NA)
Imports <sup>2</sup>	75	87	106	139	170	183	197	221	210
Stocks, end of marketing year	2,543	3,014	3,753	3,976	4,182	4,351	4,088	3,824	(NA)

NA. Not available. <sup>1</sup> U.S. tobacco only. <sup>2</sup> Source: Dept. of Commerce, Bureau of the Census. Calendar year, declared weight; includes stems, trimmings, and scrap.

Source: Dept. of Agriculture, Economic Research Service; *The Tobacco Situation*.

**No. 964. TOBACCO—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1967 TO 1969**

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (pounds)			PRODUCTION (mil. lbs.)			PRICE <sup>1</sup> (ct. per lb.)	FARM VALUE (mil. dol.)
	1967	1968	1969	1967	1968	1969	1967	1968	1969		
Total	960	880	922	2,050	1,943	1,960	1,968	1,710	1,807	69.5	71.8
Mass.	3	3	2	1,250	1,327	1,377	3	4	3	235.9	325.0
Conn.	7	7	6	1,219	1,301	1,307	9	9	7	281.6	311.0
Pa.	21	21	20	1,825	1,775	1,875	38	37	38	30.0	30.0
Ohio	10	9	9	2,171	1,987	2,406	21	19	22	66.0	64.7
Ind.	6	6	6	2,385	2,285	2,500	14	13	15	73.7	70.4
Md.	32	30	30	1,030	1,065	1,020	32	32	31	69.8	75.0
Va.	70	67	73	1,883	1,692	1,844	132	113	135	65.9	70.2
N.C.	403	358	380	2,070	1,802	1,853	835	667	716	66.6	72.1
S.C.	76	63	69	2,195	1,955	1,995	166	122	137	66.4	72.8
Ga.	72	57	61	2,076	1,878	1,615	150	108	98	71.8	77.3
Fla.	17	15	16	1,892	1,730	1,663	32	26	26	115.0	121.2
Ky.	173	173	173	2,312	2,400	2,518	400	414	437	71.9	68.0
Tenn.	58	59	59	1,908	2,072	2,042	110	122	121	69.0	65.0
Other	13	13	12	1,942	1,895	1,845	25	24	23	(NA)	12

<sup>1</sup> Season average price received by farmers. State prices weighted by sales to obtain U.S. prices.

<sup>2</sup> Average of auction sales through May 6, 1970.

Source: Dept. of Agriculture, Statistical Reporting Service; annual summaries, *Crop Production* and *Crop Values*.

**No. 965. SUGAR, BEET AND CANE—QUOTAS AND SUPPLY: 1950 TO 1969**

[In thousands of short tons, except per capita consumption in pounds]

ITEM	1950	1955	1960	1965	1967	1968	1969 (prel.)
Quota charges by supplying areas <sup>1</sup>							
United States	8,274	8,402	9,526	9,920	10,384	10,951	10,736
Beet	3,412	3,349	3,620	5,261	5,246	5,481	5,545
Mainland cane	1,749	1,797	2,165	3,025	2,924	3,085	3,216
Hawaii	518	500	619	1,099	1,169	1,204	1,169
Puerto Rico and Virgin Islands	1,145	1,052	845	1,137	1,253	1,192	1,160
Foreign areas	1,064	1,090	903	834	705	504	341
Production	3,798	3,963	4,994	3,825	4,433	4,906	4,850
Visible stocks, beginning of period	2,466	2,386	3,070	4,152	4,108	4,395	4,298
Receipts from foreign sources	1,759	1,930	2,005	2,700	2,598	2,873	2,961
Receipts from offshore domestic areas	3,783	4,027	4,885	4,027	4,804	5,130	4,885
Domestic disappearance, total	8,282	8,448	9,336	10,151	10,516	11,089	10,804
Per capita consumption (refined) <sup>2</sup>	100.6	96.3	97.6	96.4	97.1	99.3	99.7

<sup>1</sup> Sugar quotas govern the supply of sugar from all sources, foreign and domestic, available to the conterminous United States. The formulas for allocating the quotas among the supplying areas are established by Congress; the size of the quotas is determined by the Secretary of Agriculture.

<sup>2</sup> Adjusted for changes in invisible stocks (estimated) held by manufacturers, wholesalers, and retailers.

Source: Dept. of Agriculture, Statistical Reporting Service, in annual report, *Agricultural Statistics*; and Agricultural Stabilization and Conservation Service, monthly report, *Sugar Reports*.

## No. 966. SUGAR, BEET AND CANE—U.S. AND WORLD PRODUCTION: 1945 TO 1969

[In thousands of short tons, raw value. Covers centrifugal only]

YEARLY AVERAGE OR CROP YEAR	Total	UNITED STATES			Puerto Rico and Virgin Islands, cane	WORLD		
		Beet	Cane			Total	Percent U.S.	
			La. and Fla.	Hawaii				
1945-1949	3,950	1,515	455	833	1,147	27,496	14.4	
1950-1954	4,624	1,784	566	1,031	1,243	30,141	11.8	
1955-1959	4,720	2,088	572	1,013	1,047	49,673	9.5	
1960-1964	5,810	2,777	935	1,086	1,012	60,742	9.6	
1965	5,133	2,450	630	936	1,117	60,050	8.5	
1966	6,103	2,894	1,104	1,218	887	69,298	8.8	
1967	5,929	2,638	1,457	1,191	645	73,034	8.1	
1968	6,391	3,467	1,209	1,232	483	75,446	8.5	
1969 (prel.)	6,170	3,421	1,067	1,182	500	79,362	7.8	

Source: Dept. of Agriculture, Statistical Reporting Service, in annual report, *Agricultural Statistics*; and Agricultural Stabilization and Conservation Service, monthly report, *Sugar Reports*.

## No. 967. SUGARCANE, CANE SUGAR, AND MOLASSES—ACREAGE, PRODUCTION, AND VALUE: 1945 TO 1969

[Prior to 1960 and as noted, excludes Hawaii. See also *Historical Statistics, Colonial Times to 1957*, series K 205-297]

YEAR	SUGARCANE FOR SUGAR AND SEED					SUGAR PRODUCED			MOLASSES MADE	
	Acreage harvested	Yield per acre <sup>1</sup>	Production	Price per ton <sup>2</sup>	Farm value <sup>3</sup>	Raw value <sup>4</sup>	Equivalent refined <sup>5</sup>	Per ton of cane, raw value <sup>4</sup>	Total, excl. sirup	Blackstrap (80° Brix) <sup>6</sup>
	1,000 acres	Short tons	1,000 short tons	Dollars	Mil. dol.	1,000 short tons	1,000 short tons	Pounds	Mil. gallons	Mil. gallons
1945	285	23.5	6,707	5.67	38	475	443	152	50	35
1950	384	20.8	6,944	7.80	54	564	527	174	49	45
1955	284	25.5	7,248	6.60	47	574	538	168	53	49
1960	437	37.7	16,468	7.41	57	1,566	1,464	199	101	98
1965	617	38.4	23,663	7.90	110	2,322	2,170	204	146	148
1967	628	42.5	26,651	9.38	144	2,648	2,475	206	161	159
1968	606	41.0	24,825	9.29	124	2,447	2,288	204	153	150
1969	586	42.2	22,615	9.96	116	2,254	2,107	208	134	132

<sup>1</sup> Growth of 9 months in Louisiana and 12 months in Florida.

<sup>2</sup> Season average price received by farmers. Prices exclude Government payments under the Sugar Act, except in 1945.

<sup>3</sup> Excludes Hawaii. <sup>4</sup> Raw value equals 96° raw sugar as defined in Sugar Act of 1948.

<sup>5</sup> Calculated on basis of 100 pounds of raw sugar required to produce 93.40 pounds of refined sugar.

Source: Dept. of Agriculture, Statistical Reporting Service, in annual report, *Agricultural Statistics*; and Economic Research Service, annual report, *The Sugar Situation*.

## No. 968. SUGAR BEETS—ACREAGE, PRODUCTION, PRICES, AND VALUE, BY STATES: 1967 TO 1969

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (short tons)			PRODUCTION (1,000 tons)			PRICE <sup>1</sup> (dol. per ton)		FARM VALUE (mil. dol.)	
	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1967	1968	1969 (prel.)	1968 (prel.)	1969 (prel.)	1968 (prel.)	1969 (prel.)
Total <sup>2</sup>	1,122	2,410	1,575	17.1	18.0	18.1	19,197	25,363	28,518	13.81	13.30	350	368
Calif.	201	254	306	19.8	23.9	20.0	3,983	6,081	6,110	13.70	(NA)	88	(NA)
Colo.	128	168	194	16.5	15.5	17.7	2,105	2,611	3,428	14.90	(NA)	39	(NA)
Idaho	147	182	187	19.8	18.0	18.1	2,912	3,288	3,383	14.40	(NA)	47	(NA)
Mich.	72	90	98	17.4	19.0	16.2	1,256	1,708	1,500	10.70	(NA)	18	(NA)
Minn.	127	161	164	11.2	13.5	14.4	1,422	2,177	2,366	13.00	(NA)	28	(NA)
Mont.	57	66	68	17.6	15.7	18.0	1,007	1,034	1,215	15.00	(NA)	16	(NA)
Nebr.	63	72	88	13.6	17.0	19.4	853	1,222	1,707	15.40	(NA)	19	(NA)
N. Dak.	78	87	95	10.8	12.0	14.3	848	1,125	1,363	13.20	(NA)	15	(NA)
Wash.	48	55	65	22.1	25.2	25.2	1,052	1,383	1,628	14.20	(NA)	20	(NA)
Wyo.	51	62	68	16.6	16.2	18.2	849	1,003	1,232	15.40	(NA)	15	(NA)

NA Not available.

<sup>1</sup> See footnote 2, table 967.

<sup>2</sup> Includes data for States not shown separately.

Source: Dept. of Agriculture, Statistical Reporting Service; annual summaries, *Crop Production* and *Crop Values*.

No. 969. COMMERCIAL VEGETABLE AND OTHER SPECIFIED CROPS—ACREAGE, PRODUCTION, AND VALUE, 1968 AND 1969, AND LEADING STATES, 1969

[Relates to commercial production for fresh market and processing combined. Includes market garden areas but excludes minor producing acreage in minor producing States. Excludes production for home use in farm and nonfarm gardens. Value is for season or crop year and should not be confused with calendar-year income]

Crop	ACREAGE <sup>1</sup> (1,000 acres)			PRODUCTION <sup>2</sup> (1,000 short tons)			VALUE <sup>3</sup> (\$1,000)	
	1968	1969 (prel.)		1968	1969 (prel.)		1968	1969 (prel.)
		Total	Leading States		Total	Leading States		
Artichokes	9.6	10.1	Calif.	28.8	32.8	Calif.	5,772	6,933
Asparagus	125.4	123.8	Calif., N.J.	101.8	145.8	Calif., Wash.	60,840	57,451
Beans, Lima <sup>4</sup>	115.2	82.8	Calif., Del.	121.6	97.7	Calif., Del.	25,413	17,533
Beans, snap	362.2	327.5	N.Y., Wis.	804.2	733.6	Oreg., N.Y.	107,161	99,220
Beets	23.0	17.8	Wis., N.Y.	281.2	215.8	N.Y., Wis.	7,653	4,728
Broccoli	43.0	36.4	Calif., Oreg.	154.0	115.2	Calif., Oreg.	27,497	24,162
Brussels sprouts	6.8	6.8	Calif., N.Y.	31.9	31.4	Calif., N.Y.	7,427	7,180
Cabbage	107.5	111.7	Tex., Fla.	1,181.2	1,131.8	N.Y., Fla.	66,106	63,743
Cantaloupes	116.8	125.9	Calif., Tex.	676.8	686.2	Calif., Ariz.	78,261	77,021
Carrots	72.6	80.4	Tex., Calif.	907.3	918.8	Calif., Tex.	83,498	84,097
Cauliflower	27.3	26.2	Calif., N.Y.	136.4	127.4	Calif., N.Y.	24,200	24,694
Celery	32.6	32.6	Calif., Fla.	704.8	764.6	Calif., Fla.	71,309	82,934
Corn, sweet	700.7	631.7	Wis., Minn.	3,099.0	2,708.3	Minn., Wis.	128,447	113,788
Cucumbers	109.8	181.6	N.C., Mich.	777.9	741.8	Mich., Fla.	82,835	80,568
Eggplant	3.2	3.7	Fla., N.J.	22.6	26.4	Fla., N.J.	4,750	4,570
Escarole	7.8	9.5	Fla., N.J.	53.3	54.8	Fla., N.J.	8,107	8,180
Garlic	6.4	7.3	Calif.	40.0	42.0	Calif.	7,192	7,160
Honeydew melons	10.3	13.8	Calif., Tex.	69.0	93.7	Calif., Tex.	9,305	10,902
Lettuce	221.0	227.8	Calif., Ariz.	2,206.5	2,222.8	Calif., Ariz.	199,276	241,041
Mint for oil	98.8	104.8	Wash., Oreg.	2.7	3.2	Wash., Oreg.	28,932	30,537
Onions	106.5	100.4	Tex., Calif.	1,442.4	1,400.8	Calif., Tex.	92,618	95,986
Peas, green <sup>5</sup>	454.1	407.6	Wis., Wash.	582.0	524.7	Wis., Wash.	63,184	55,746
Peppers, green	52.6	52.8	Fla., Calif.	246.6	233.9	Fla., Calif.	51,712	51,441
Spinach	39.2	35.6	Tex., Calif.	194.4	169.9	Calif., Tex.	14,790	12,996
Strawberries	62.6	57.1	Oreg., Calif.	261.5	242.8	Calif., Oreg.	111,452	109,673
Tomatoes	516.5	420.5	Calif., Fla.	7,048.4	5,910.5	Calif., Ohio	607,557	394,822
Watermelons	286.1	276.5	Tex., Fla.	1,380.6	1,315.4	Fla., Tex.	51,844	54,084

<sup>1</sup> Acreage of crops for harvest for fresh market, including any partially harvested or not harvested because of low prices or other economic factors, plus acreage harvested for processing.

<sup>2</sup> Includes some quantities not marketed and excluded in computing value.

<sup>3</sup> Fresh market vegetables valued at f.o.b. shipping point, except garlic which is field run basis at packinghouse door. Processing vegetables are equivalent returns at packinghouse door.

<sup>4</sup> Shelled basis; 2 pounds of Lima beans in the shell produce approximately 1 pound of shelled beans.

<sup>5</sup> Shelled basis; 2½ pounds of peas in the shell produce approximately 1 pound of shelled peas.

Source: Dept. of Agriculture, Statistical Reporting Service; annual summary, *Commercial Vegetables*.

No. 970. FRUITS—PRODUCTION AND VALUE, 1968 AND 1969, AND LEADING STATES, 1969

[See *Historical Statistics, Colonial Times to 1957*, series K 316-328, for production and prices]

CROP	Unit	PRODUCTION <sup>1</sup> (1,000 units)			FARM VALUE (mil. dol.)	
		1968	1969 (prel.)		1968	1969 (prel.)
			Total	Leading States		
Apples (34 States) <sup>2</sup>	Pounds	5,441,900	6,761,900	Wash., N.Y.	382	285
Peaches	Pounds	3,500,700	3,695,400	Calif., S.C.	194	196
Pears	Tons	616	711	Calif., Oreg.	83	72
Grapes	Tons	3,540	3,874	Calif.	237	264
Cherries, sweet	Tons	91	124	Oreg., Calif.	40	42
Cherries, tart	Tons	137	150	Mich.	42	22
Plums	Tons	106	66	Calif.	19	16
Prunes (dried basis)	Tons	153	129	Calif.	46	39
Oranges and tangerines (4 States)	Boxes <sup>3</sup>	128,080	188,090	Fla.	404	496
Grapefruit (4 States)	Boxes <sup>4</sup>	44,058	54,170	Fla.	111	83
Lemons (2 States) <sup>5</sup>	Boxes <sup>6</sup>	16,850	15,810	Calif.	65	68

<sup>1</sup> Excludes quantities not harvested or not marketed on account of economic conditions.

<sup>2</sup> Production in commercial orchards with 100 or more bearing age trees.

<sup>3</sup> Net content of box varies. In California and Arizona, approximate average for oranges and tangerines is 75 pounds; in other States, oranges 90 pounds; and Florida tangerines, 95 pounds.

<sup>4</sup> Approximate average, net weight, is 65 pounds in Arizona and California, 85 in Florida, and 80 in Texas.

<sup>5</sup> Includes estimates for Arizona. <sup>6</sup> About 76 pounds net.

Source: Dept. of Agriculture, Statistical Reporting Service; annual summaries, *Crop Production* and *Crop Values*.

## No. 971. CANNED FOODS—PRODUCTION: 1950 TO 1969

[In millions of standard cases of 24 No. 303 cans, except as noted. Excludes Alaska and Hawaii, except as noted. See *Historical Statistics, Colonial Times to 1967*, series P 190-191, for canned corn and tomatoes]

PRODUCT	1950	1955	1960	1963	1964	1965	1966	1967	1968	1969
Fruits <sup>1</sup>	75.4	91.4	101.5	100.7	120.3	106.9	115.6	96.3	116.7	(NA)
Apples	4.9	3.3	3.1	3.7	23.6	24.1	28.2	23.4	28.3	32.0
Applesauce	8.3	8.3	11.8	18.0	215.3	215.9	211.5	213.9	214.1	16.8
Apricots	3.7	5.9	6.1	4.1	5.2	5.1	5.0	4.2	4.5	5.5
Berries <sup>2</sup>	1.3	1.1	0.8	0.8	0.7	0.7	0.9	1.0	0.5	0.5
Cherries, red, pitted	3.8	3.5	1.6	0.9	3.6	2.4	1.0	0.8	1.1	1.5
Cherries, sweet	0.7	1.4	0.6	0.5	1.0	0.7	0.6	0.8	0.5	0.9
Citrus salad	0.6	0.5	0.2	0.3	0.2	0.2	0.3	0.2	0.4	(NA)
Cranberry sauce <sup>3</sup>	2.5	3.0	2.2	3.3	3.1	3.4	3.6	3.5	3.8	3.5
Figs <sup>4</sup>	0.5	0.6	0.5	0.4	0.5	0.8	0.3	0.3	0.2	0.3
Fruit cocktail <sup>5</sup>	7.5	9.8	12.5	12.6	16.2	14.5	15.8	13.4	16.6	16.7
Fruit salad <sup>6</sup>	0.6	0.8	0.8	0.8	0.8	0.7	0.8	0.6	0.8	0.8
Grapefruit sections <sup>7</sup>	3.2	3.3	3.0	2.1	2.5	2.8	3.3	2.4	2.3	(NA)
Mixed fruits <sup>8</sup>	0.1	0.2	0.4	0.4	0.6	0.5	0.5	0.3	0.5	0.7
Olives <sup>9</sup>	1.8	1.8	2.8	2.8	2.4	2.5	2.9	0.9	4.5	4.1
Peaches	16.8	23.1	30.8	33.2	37.8	30.0	36.7	26.8	35.9	37.1
Pears	0.4	8.3	8.5	5.6	11.4	8.4	11.0	5.7	10.3	10.6
Pineapple <sup>10</sup>	11.7	14.7	15.0	15.0	13.6	15.0	16.7	18.4	18.5	(NA)
Plums <sup>11</sup>	1.0	1.7	0.4	1.2	1.6	1.7	1.5	1.9	0.7	2.2
Juices <sup>12</sup>										
Apple	3.4	3.4	6.2	8.4	9.6	9.6	8.9	8.7	9.4	13.4
Grapefruit	18.3	13.8	11.0	6.3	10.9	18.8	21.0	15.8	20.5	(NA)
Orange	22.5	16.6	11.5	8.2	12.8	12.1	16.3	10.4	13.5	(NA)
Orange-grapefruit	9.4	5.4	3.2	2.6	2.5	2.9	3.7	2.2	2.6	(NA)
Pineapple	15.7	16.2	14.4	14.8	13.8	15.4	15.0	15.1	14.0	(NA)
Tomato	26.2	26.9	33.0	34.5	35.8	32.8	31.9	35.1	31.4	26.4
Seasonal vegetables										
Asparagus	151.5	167.0	177.9	203.4	192.0	207.5	207.0	235.7	245.2	(NA)
Beans, green and wax	5.5	7.6	8.0	9.3	8.2	7.2	7.9	6.6	6.9	16.7
Beans, lima	25.6	28.5	33.2	37.7	37.4	45.6	40.5	53.2	51.8	46.8
Beets <sup>13</sup>	3.9	8.4	3.8	3.1	2.2	3.0	3.5	4.0	3.8	3.8
Carrots <sup>14</sup>	9.9	9.2	8.8	12.7	10.7	10.0	11.4	11.8	14.6	(NA)
Corn, sweet	2.3	2.2	5.0	5.1	4.5	4.5	7.1	5.5	5.1	(NA)
Greens, leafy	22.3	29.4	35.3	44.2	37.6	39.1	45.5	49.3	59.8	49.4
Mixed vegetables	2.4	3.1	2.9	2.8	2.9	2.7	2.9	3.6	2.8	3.5
Mushrooms <sup>15</sup>	2.9	2.0	2.6	2.7	3.1	3.3	3.4	3.6	3.8	4.4
Peas, field	(NA)	(NA)	1.8	1.9	1.9	2.1	2.2	2.0	(NA)	
Peas, green	2.1	2.2	2.1	2.1	1.8	1.8	2.5	2.7	2.4	2.9
Pimientos	35.5	33.4	28.7	33.6	30.0	37.6	31.9	37.7	36.2	32.1
Pumpkin and squash	1.5	1.2	0.9	0.4	0.7	0.8	0.7	0.8	0.8	0.9
Spinach <sup>16</sup>	2.7	5.1	5.0	4.0	3.8	3.9	4.6	4.6	4.6	5.2
Tomatoes <sup>17</sup>	6.8	7.3	7.8	8.0	7.6	8.4	7.0	7.4	8.0	10.5.4
Other vegetable packs <sup>18</sup>	25.8	30.2	31.0	33.0	36.4	36.0	32.7	39.1	37.5	24.6
Nonseasonal vegetables:										
Sauerkraut <sup>19</sup>	10.9	9.3	9.8	9.6	9.0	10.8	10.0	11.4	10.8	(NA)
Sweetpotatoes	5.2	6.2	6.9	8.8	7.9	11.1	10.0	9.8	10.8	12.5
White potatoes	1.9	3.3	4.2	3.5	3.8	5.0	5.3	4.8	5.7	6.1
Catsup and chili sauce	14.2	22.4	30.0	29.8	34.0	35.6	37.4	39.4	(NA)	(NA)
Seafood, salmon <sup>20</sup>	(NA)	(NA)	(NA)	3.9	3.5	4.3	2.1	3.4	2.5	

NA. Not available. <sup>1</sup> Basis 24 No. 2½ cans. <sup>2</sup> Pack beginning in year shown.

<sup>3</sup> Blackberries, blueberries, boysenberries, gooseberries, loganberries, raspberries, and strawberries.

<sup>4</sup> California only. <sup>5</sup> Estimated by Calif. Olive Association.

<sup>6</sup> Hawaiian pack plus receipts from Puerto Rico. Beginning 1955, represents U.S. pack and foreign operations.

<sup>7</sup> Beginning 1965, purple plums only. <sup>8</sup> Basis 24 No. 2 cans.

<sup>9</sup> Actual cases; excludes combination vegetable-tomato juices. <sup>10</sup> Actual cases.

<sup>11</sup> Succotash, carrots and peas, okra and tomatoes. <sup>12</sup> Basis 48/1 lb. cans. Includes Alaska.

Source: National Canners Association, Washington, D.C.; *Canned Food Pack Statistics*.

## No. 972. PRINCIPAL FROZEN FOODS—PRODUCTION: 1950 TO 1969

[In millions of pounds]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969
Total	2,972	7,307	10,868	14,144	13,748	16,536	16,214	(NA)
Vegetables:								
Total, excluding potatoes	558	1,011	1,407	1,800	1,998	2,017	2,122	2,048
Potato products	29	129	551	219	1,460	1,491	1,736	1,867
Fruits and berries, excl. citrus juices	472	660	680	653	684	642	728	678
Juices and drinks <sup>1</sup>	1,212	3,429	4,556	5,514	4,350	6,657	5,259	(NA)
Meat	35	250	310	450	525	600	720	(NA)
Poultry	411	1,000	2,000	2,231	2,200	2,369	2,472	1,942
Prepared foods	75	625	1,100	1,875	2,115	2,328	2,684	3,053
Seafoods	180	203	284	402	435	434	408	486

NA. Not available.

<sup>1</sup> Includes single strength drinks, and juices and concentrated juices and drinks reconstituted.

Source: National Frozen Food Association, Hershey, Pa.; *Frozen Food Fact Book and Directory*. Data from National Association of Frozen Food Packers; Dept. of Agriculture, Statistical Reporting Service; and Dept. of the Interior, Fish and Wildlife Service.

## No. 973. LIVESTOCK—NUMBER ON FARMS AND VALUE: 1940 TO 1970

[Alaska and Hawaii excluded from census data prior to 1959 and from annual data prior to 1961. See also *Historical Statistics, Colonial Times to 1957*, series K 195-204]

YEAR	ALL CATTLE			HOGS AND PIGS			STOCK SHEEP		
	Number (1,000 head)	Value		Number (1,000 head)	Value		Number (1,000 head)	Value	
		Total (mil. dol.)	Per head		Total (mil. dol.)	Per head		Total (mil. dol.)	Per head
<b>CENSUS DATA<sup>1</sup></b>									
1940 (Apr. 1)	60,675	2,598	\$42.82	34,037	285	\$8.36	40,120	240	\$5.99
1945 (Jan. 1)	82,654	5,603	67.78	46,735	988	21.14	41,224	350	8.71
1950 (Apr. 1)	78,782	9,136	119.02	55,722	1,098	19.70	31,387	555	17.69
1954 (Oct.-Nov.)	95,027	8,233	86.04	57,093	1,891	33.13	31,619	472	14.93
1959 (Oct. 1)	92,584	12,511	133.20	67,949	1,371	20.18	33,945	556	16.38
1964 (Dec.)	105,558	11,946	113.17	54,080	1,324	24.48	25,472	406	16.06
<b>ANNUAL DATA (JAN. 1)<sup>2</sup></b>									
1940	68,308	2,770	40.60	61,165	476	7.78	46,266	294	6.35
1945	85,573	5,722	66.90	59,373	1,225	20.60	39,600	335	8.45
1950	77,963	9,630	124.00	58,937	1,600	27.10	26,182	466	17.30
1955	96,592	8,517	88.20	50,474	1,542	30.60	27,137	404	14.90
1960	96,236	13,150	137.00	59,026	1,092	18.50	28,840	477	16.60
1965	109,000	12,300	113.00	50,792	1,244	24.50	21,843	346	15.80
1968	109,152	16,234	149.00	58,777	1,647	28.30	19,105	366	19.20
1969	108,885	17,304	158.00	60,682	1,853	30.50	18,332	459	22.00
1970 (prel.)	112,330	20,175	180.00	60,743	2,212	39.00	17,578	509	24.70

<sup>1</sup> For 1940, animals over 3 months, except hogs over 4 months and sheep over 6 months; thereafter, animals of all ages. <sup>2</sup> Not available for Florida, Georgia, and South Carolina.

<sup>3</sup> Beginning 1968, data for December 1, preceding year.

Source: Census data—Dept. of Commerce, Bureau of the Census; *U.S. Census of Agriculture: 1964*, vol. II. Annual data—Dept. of Agriculture, Statistical Reporting Service; in annual report, *Agricultural Statistics*, and annual livestock summaries.

## No. 974. MEATS AND LARD—SLAUGHTERING, PRODUCTION, AND TRADE: 1950 TO 1969

[Quantities represent carcass weight equivalent. Excludes Alaska and Hawaii except for exports and imports. Covers inspected, noninspected, retail, and farm slaughter. Excludes edible byproducts. Excludes USDA exports and shipments for Lend-Lease, UNRRA and other claimants, military civilian feeding, and voluntary relief feeding. See *Historical Statistics, Colonial Times to 1957*, series K 214-225]

ITEM	1950	1955	1960	1965	1967	1968	1969
<b>All meats:</b>							
Animals slaughtered, total	1,000 head	121,622	137,055	135,034	130,658	136,858	139,547
Under Federal inspection	percent	72	75	78	82	82	84
Production, total	mil. lb.	22,075	26,895	28,203	31,502	34,194	35,237
Federally inspected	percent	73	75	78	82	84	86
Exports of U.S. production	mil. lb.	185	189	197	231	246	288
Imports for consumption	mil. lb.	384	406	1,048	1,347	1,841	2,081
<b>Beef:</b>							
Animals slaughtered, total	1,000 head	18,014	26,587	26,020	33,171	34,295	35,414
Under Federal inspection	percent	70	72	76	80	81	86
Production, total	mil. lb.	9,634	13,569	14,728	18,699	20,184	20,846
Federally inspected	percent	74	75	78	82	83	86
Exports of U.S. production	mil. lb.	21	59	55	91	88	88
Imports for consumption	mil. lb.	338	229	760	923	1,313	1,600
<b>Veal:</b>							
Animals slaughtered, total	1,000 head	10,601	12,804	8,616	7,783	6,107	5,613
Under Federal inspection	percent	56	58	61	65	66	69
Production, total	mil. lb.	1,230	1,578	1,109	1,020	792	734
Federally inspected	percent	54	67	66	56	53	57
<b>Lamb and mutton:</b>							
Animals slaughtered, total	1,000 head	13,244	16,553	16,240	13,300	13,036	12,119
Under Federal inspection	percent	89	87	86	88	88	90
Production, total	mil. lb.	597	758	768	651	646	602
Federally inspected	percent	89	87	87	88	89	91
<b>Pork:</b>							
Animals slaughtered, total	1,000 head	79,268	81,051	84,150	76,894	83,421	86,401
Under Federal inspection	percent	72	76	79	88	86	87
Production, total <sup>1</sup>	mil. lb.	10,714	10,900	11,598	11,132	12,572	13,056
Federally inspected	percent	73	76	79	84	86	87

<sup>1</sup> Comprises weight of dressed hog carcass less head bones and carcass fat rendered into lard.

Source: Dept. of Agriculture, Economic Research Service; *The Livestock and Meat Situation* and *The National Food Situation*.

## No. 975. LIVESTOCK ON FARMS—NUMBER, BY STATES: 1964 AND 1970

[In thousands. For composition of regions, see fig. I, p. xii]

STATE	ALL CATTLE		MILK COWS		SHEEP AND LAMBS		HOGS AND PIGS	
	1964 (Nov.- Dec.)	1970 (Jan. 1)	1964 (Nov.- Dec.)	1970 <sup>1</sup> (Jan. 1)	1964 (Nov.- Dec.)	1970 (Jan. 1)	1964 (Nov.- Dec.)	1969 (Dec. 1)
United States.....	105,558	112,330	14,623	13,875	25,472	20,422	54,080	56,743
North.....	52,685	52,671	9,860	9,066	8,592	6,101	44,863	44,736
South.....	33,359	38,062	3,191	3,096	5,360	4,603	8,166	10,823
West.....	19,514	21,597	1,572	1,713	11,520	9,718	1,051	1,184
New England.....	874	817	511	504	53	44	139	141
Maine.....	158	147	76	77	23	16	13	11
New Hampshire.....	82	73	44	43	6	5	13	14
Vermont.....	308	348	230	230	8	6	8	7
Massachusetts.....	127	114	70	72	9	10	82	89
Rhode Island.....	16	13	10	8	2	2	9	10
Connecticut.....	123	122	72	74	5	5	14	10
Middle Atlantic.....	3,901	3,780	2,022	2,014	330	273	667	837
New York.....	1,959	1,867	1,134	1,127	130	100	95	108
New Jersey.....	158	132	97	80	10	8	122	121
Pennsylvania.....	1,789	1,781	791	807	190	165	450	613
East North Central.....	14,077	12,876	3,951	3,693	2,286	1,789	16,770	15,978
Ohio.....	2,184	2,136	544	403	838	719	2,513	2,567
Indiana.....	2,053	1,918	328	270	361	266	4,497	4,499
Illinois.....	3,751	3,278	422	359	561	389	7,309	6,551
Michigan.....	1,725	1,468	574	509	323	248	716	691
Wisconsin.....	4,384	4,076	2,083	2,002	203	167	1,735	1,680
West North Central.....	33,834	35,198	3,377	2,855	5,924	3,995	27,288	27,780
Minnesota.....	4,281	3,958	1,237	1,089	774	554	3,396	3,162
Iowa.....	7,285	7,478	736	568	1,366	869	13,674	13,960
Missouri.....	4,522	4,940	461	400	447	288	3,854	4,197
North Dakota.....	2,465	2,086	229	163	507	377	342	315
South Dakota.....	4,144	4,410	223	200	1,000	1,155	1,776	1,674
Nebraska.....	5,987	6,330	250	211	550	374	2,982	2,839
Kansas.....	5,150	6,016	241	224	591	378	1,264	1,043
South Atlantic.....	7,276	7,804	1,127	1,144	489	405	3,733	5,121
Delaware.....	37	32	18	16	2	2	33	40
Maryland.....	415	426	175	182	23	20	151	192
Virginia.....	1,312	1,432	246	245	223	189	480	610
West Virginia.....	482	475	84	63	195	183	78	71
North Carolina.....	906	1,081	198	207	26	18	1,046	1,612
South Carolina.....	555	642	77	74	5	2	369	476
Georgia.....	1,747	1,889	153	152	8	5	1,278	1,780
Florida.....	1,822	1,827	176	199	7	6	298	331
East South Central.....	8,676	9,551	1,185	1,108	321	168	3,158	3,847
Kentucky.....	2,341	2,603	407	388	184	100	1,098	1,445
Tennessee.....	2,136	2,308	370	345	98	45	958	926
Alabama.....	1,848	1,953	160	151	12	6	721	949
Mississippi.....	2,351	2,487	248	224	27	17	381	527
West South Central.....	17,407	20,707	879	844	4,549	4,030	1,275	1,855
Arkansas.....	1,574	1,805	132	106	15	8	220	288
Louisiana.....	1,807	1,705	187	196	43	24	181	233
Oklahoma.....	4,200	4,985	168	161	149	138	264	375
Texas.....	9,766	12,212	392	381	4,342	3,860	620	959
Mountain.....	11,987	13,628	505	538	8,725	7,703	582	753
Montana.....	2,873	3,814	55	47	1,460	1,146	168	161
Idaho.....	1,003	1,701	165	169	1,007	785	106	118
Wyoming.....	1,348	1,476	23	20	2,020	1,934	30	29
Colorado.....	2,490	3,299	93	112	1,482	1,243	170	271
New Mexico.....	1,203	1,386	35	39	861	834	39	48
Arizona.....	1,104	1,302	46	54	546	508	24	61
Utah.....	748	824	75	82	1,105	1,014	38	56
Nevada.....	609	626	13	15	236	239	7	9
Pacific.....	7,525	7,969	1,066	1,175	2,795	2,015	470	431
Washington.....	1,376	1,260	192	200	211	141	98	90
Oregon.....	1,620	1,593	126	118	626	530	113	118
California.....	4,303	4,861	732	840	1,925	1,317	190	165
Alaska.....	8	9	2	2	21	27	1	1
Hawaii.....	218	246	14	15	12	-	68	57

- Represents zero. <sup>1</sup> Represents cows and heifers 2 years old and over kept for milk.

Source: 1964 data, Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1964, Vol. II; 1970 data, Dept. of Agriculture, Statistical Reporting Service; annual livestock summaries.

## Livestock—Dairying

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## No. 976. LIVESTOCK—LIVEWEIGHT PRODUCTION AND ANNUAL AVERAGE PRICE RECEIVED BY FARMERS: 1940 TO 1969

[Price per 100 pounds. Prior to 1964 excludes Alaska and Hawaii except sheep; exclude Hawaii for all years. See also *Historical Statistics, Colonial Times to 1957*, series K 205-212]

YEAR	ALL CATTLE			HOGS		SHEEP		
	Production <sup>1</sup>	Price, beef	Price, calves	Production <sup>1</sup>	Price	Production <sup>1</sup>	Price, sheep	Price, lambs
1940	15,702	\$7.56	\$8.83	17,043	\$5.39	2,101	\$3.95	\$8.10
1945	19,517	12.10	13.00	18,843	14.00	1,912	6.88	13.10
1950	21,185	23.30	26.30	20,214	18.00	1,336	11.60	25.10
1955	28,099	15.60	16.80	20,184	15.00	1,618	5.78	18.40
1960	28,798	20.40	22.90	19,203	15.30	1,628	5.60	17.90
1964	34,836	18.00	20.40	20,217	14.80	1,331	6.00	19.90
1965	33,879	19.90	22.00	18,055	20.60	1,217	6.34	22.80
1966	35,020	22.20	26.00	19,107	22.80	1,261	6.84	23.40
1967	35,932	22.30	26.30	20,034	18.90	1,143	6.35	22.10
1968	36,308	23.40	27.60	21,102	18.50	1,130	6.55	24.40
1969	36,988	26.20	31.50	20,360	22.20	1,033	7.94	27.20

<sup>1</sup> Includes adjustment for livestock shipped in and inventory changes.

Source: Dept. of Agriculture, Statistical Reporting Service; in annual reports, *Agricultural Statistics and Meat Animals—Farm Production, Disposition, and Income, by States, 1908-1969*.

## No. 977. DAIRYING—COWS AND DAIRY PRODUCTS: 1950 TO 1969

[In millions of pounds, except as indicated. Excludes Alaska and Hawaii, except as noted. See also *Historical Statistics, Colonial Times to 1967*, series K 226-239]

ITEM	1950	1955	1960	1965	1967	1968	1969 (prel.)
Cows and heifers, 2 yrs. old and over, kept for milk, Jan. 1.....	1,000 head						
23,853	23,462	19,527	1,16,981	1,15,198	1,14,644	1,14,152	
Value per head.....	dollars	177.00	134.00	1188.00	1247.00	1251.00	1269.00
Milk produced on farms.....		116,602	122,945	1123,109	1124,173	1118,709	1117,234
Whole milk sold from farms <sup>2</sup> .....		78,140	93,632	1106,013	1114,547	1111,184	1110,547
Production of dairy products:							
Butter, factory <sup>3</sup> .....	1,386	1,383	1,373	1,325	1,225	1,165	1,120
Cheese, factory <sup>4</sup> .....	1,191	1,367	1,478	1,755	1,919	1,944	2,003
American <sup>5</sup> .....	897	1,008	1,007	1,170	1,288	1,286	1,287
Swiss (including block).....	99	117	121	123	132	130	(NA)
Brick, Munster, and Limburger.....	86	49	54	56	54	453	(NA)
Cream and Neufchâtel.....	69	80	106	123	122	119	(NA)
All Italian varieties.....	60	86	168	244	284	315	(NA)
All other varieties <sup>6</sup> .....	32	29	37	43	43	46	(NA)
Condensed milk.....	1,057	1,078	1,273	1,442	1,327	1,358	(NA)
Evap. milk, unskimmed, unsweetened.....	2,882	2,580	2,177	1,603	1,493	1,380	1,406
Condensed or evaporated buttermilk.....	183	63	8	2	3	4	(NA)
Dry whole milk.....	125	108	98	89	74	494	475
Nonfat dry milk solids <sup>7</sup> .....	899	1,388	1,844	2,013	1,709	1,631	(NA)
Dry whey.....	156	211	277	404	403	409	(NA)
Malted milk powder.....	31	34	26	22	15	420	(NA)
Ice cream of all kinds <sup>8</sup> .....	554	620	1,700	1,767	1,745	1,772	(NA)
Sherbet (excludes water ices).....	17	37	141	145	146	1449	(NA)
Ice milk.....	37	90	1,145	1,231	1,249	1,260	(NA)
Wholesale prices:							
Wisconsin Cheese Exchange, twins or cheddars.....	cents per lb.	30.8	31.6	34.6	35.8	42.7	(NA)
Butter, N.Y. (Grade A).....	cents per lb.	62.2	68.2	69.9	61.0	67.5	67.8
Prices received by farmers:							
Milkfat in cream.....	cents per lb.	62.0	57.8	60.5	61.1	68.2	68.7
Whole milk:							
Wholesale, per 100 lb.....	dollars	3.89	4.01	4.21	4.23	5.01	5.25
Retail.....	cents per qt.	18.5	20.8	21.7	22.3	24.0	24.7

NA. Not available. <sup>1</sup> Includes Alaska and/or Hawaii.

<sup>2</sup> Comprises sales to plants and dealers, and retail sales by farmers direct to consumer.

<sup>3</sup> Includes whey butter. <sup>4</sup> Preliminary. <sup>5</sup> Excludes full-skim American-type cheese.

<sup>6</sup> Includes total American, part-skim and full-skim American-type cheese.

<sup>7</sup> Includes Blue Mold. <sup>8</sup> Includes dry skim milk for animal feed.

<sup>9</sup> Includes ice cream made by counter freezers and by other small retailers.

Source: Dept. of Agriculture, Statistical Reporting Service; annual reports, *Production of Manufactured Dairy Products and Milk Production, Disposition, and Income*; also in annual report, *Agricultural Statistics*.

## No. 978. WHOLE MILK SOLD, BY STATES: 1959 AND 1964

[Quantity in millions of pounds. For composition of regions, see fig. I, p. xii]

STATE	Farms reporting, 1964	QUANTITY		STATE	Farms reporting, 1964	QUANTITY	
		1959	1964			1959	1964
United States	544,794	97,606	107,422	South Atlantic—Con.			
North	400,886	68,188	75,821	Virginia	10,597	1,519	1,507
South	110,673	15,844	17,118	West Virginia	3,109	395	371
West	33,235	13,574	14,484	North Carolina	7,492	956	1,084
New England	14,450	4,347	4,282	South Carolina	1,663	407	420
Maine	2,568	685	592	Georgia	2,637	735	821
New Hampshire	1,555	380	366	Florida	711	1,087	1,256
Vermont	6,184	1,709	1,824	East South Central	61,217	4,788	5,233
Massachusetts	2,166	724	737	Kentucky	27,142	1,715	1,981
Rhode Island	263	114	98	Tennessee	22,699	1,507	1,745
Connecticut	1,714	724	665	Alabama	3,615	535	647
Middle Atlantic	65,166	16,503	17,797	Mississippi	7,761	941	911
New York	32,226	9,355	10,143	West South Central	18,366	4,363	4,784
New Jersey	2,052	989	911	Arkansas	5,304	614	667
Pennsylvania	29,888	6,169	6,743	Louisiana	2,594	552	793
East North Central	175,247	31,128	33,224	Oklahoma	4,780	953	968
Ohio	28,820	4,323	4,557	Texas	5,688	2,244	2,456
Indiana	18,567	2,550	2,643	Mountain	17,025	3,727	3,763
Illinois	19,034	3,562	3,527	Montana	1,196	206	228
Michigan	28,874	4,456	5,013	Idaho	9,378	1,301	1,258
Wisconsin	82,052	16,227	17,484	Wyoming	523	101	122
West North Central	146,028	16,210	20,518	Colorado	1,668	683	673
Minnesota	58,015	7,746	9,203	New Mexico	403	178	255
Iowa	33,178	3,407	4,746	Arizona	340	386	479
Missouri	26,983	2,521	2,591	Utah	3,376	688	629
North Dakota	3,290	235	477	Nevada	141	85	120
South Dakota	7,640	495	1,027	Pacific	16,210	9,847	10,720
Nebraska	7,320	550	1,049	Washington	5,200	1,688	1,656
Kansas	9,617	1,256	1,425	Oregon	4,878	923	854
South Atlantic	31,090	6,692	7,051	California	8,472	7,158	8,048
Delaware	596	179	188	Alaska	85	15	22
Maryland	4,385	1,413	1,444	Hawaii	75	107	131

Source: Dept. of Commerce, Bureau of the Census; U.S. Census of Agriculture: 1964, Vol. II.

## No. 979. POULTRY—NUMBER ON FARMS, VALUE, EGGS PRODUCED, AND PRICES: 1950 TO 1970

[Prior to 1965, excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1957*, series K 242-253]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969	1970
Chickens:									
Number, Jan. 1	... mil.	457	391	369	394	393	420	425	432
Value, total	... mil. dol.	623	411	301	462	475	513	485	683
Value per head	... dol.	1.36	1.05	1.06	1.17	1.21	1.20	1.14	1.35
Number produced	... mil.	535	375	260	240	282	265	247	(NA)
Production value	... mil. dol.	513	302	139	102	124	99	98	118 (NA)
Price per lb. <sup>2</sup>	... cents	22.2	18.6	12.2	8.9	9.7	7.9	8.2	9.7 (NA)
Eggs:									
Number produced	... mil.	58,954	59,526	61,462	65,602	66,484	70,081	69,270	68,925 (NA)
Number sold	... mil.	52,188	54,015	57,818	63,636	64,872	68,473	67,932	67,763 (NA)
Price per dozen <sup>2</sup>	... cents	36.3	39.5	36.1	33.7	39.1	31.2	34.0	40.0 (NA)
Production value	... mil. dol.	1,778	1,955	1,848	1,844	2,165	1,821	1,963	2,208 (NA)
Turkeys:									
Number, Jan. 1	... 1,000	5,124	4,917	5,633	6,100	6,905	7,817	7,301	6,604 6,874
Value, total	... mil. dol.	32	26	28	27	36	40	34	33 37
Value per head	... dol.	6.34	5.33	4.89	4.40	5.26	5.13	4.65	4.95 5.50
Number produced	... mil.	44	65	84	106	116	126	106	106 (NA)
Production value	... mil. dol.	269	329	377	424	490	458	413	453 (NA)
Price per lb. <sup>2</sup>	... cents	32.9	30.2	26.4	22.2	23.1	19.7	20.5	22.4 (NA)

NA Not available.

<sup>1</sup> Excludes commercial broilers.<sup>2</sup> Average annual price received by farmers.Source: Dept. of Agriculture, Statistical Reporting Service. In annual report, *Agricultural Statistics*.

## No. 980. EGGS AND POULTRY—PRODUCTION, BY STATES: 1968 AND 1969

[Eggs in millions; other figures in thousands. For composition of regions, see fig. I, p. xii]

STATE	EGGS PRODUCED		CHICKENS RAISED		BROILERS PRODUCED		CHICKS HATCHED BY COMMERCIAL HATCHERIES		TURKEYS RAISED	
	1968	1969	1968	1969	1968	1969	1968	1969	1968	1969
United States	69,270	68,925	301,780	312,182	2,621,406	2,788,195	3,313,390	3,554,928	106,549	106,416
North	20,473	28,540	119,702	121,782	(D)	(D)	470,439	484,720	60,707	48,525
South	28,213	28,800	139,451	147,077	2,202,821	2,449,189	2,634,581	2,848,535	(D)	(D)
West	11,584	11,585	42,627	43,323	(D)	(D)	208,370	221,664	(D)	(D)
New England	3,149	3,294	14,648	14,417	88,026	83,660	122,055	122,682	493	419
Maine	1,226	1,325	5,927	6,435	72,429	72,900	80,823	84,376	40	14
New Hampshire	376	345	1,890	1,314	1,376	482	1,8,017	1,7,244	42	31
Vermont	123	133	492	553	02	18	(1)	(1)	25	8
Massachusetts	509	524	2,316	2,086	5,360	3,216	2 17,047	2 17,800	250	248
Rhode Island	76	72	336	364	656	387	(2)	(2)	14	12
Connecticut	839	895	3,687	3,676	8,184	6,657	10,168	13,253	122	111
Middle Atlantic	6,490	6,478	24,732	24,466	49,133	52,386	3 111,832	3 110,492	2,304	2,451
New York	2,409	2,309	9,233	9,602	2,709	2,432	(D)	(D)	344	412
New Jersey	932	853	2,842	2,132	1,000	950	(D)	(D)	349	111
Pennsylvania	3,149	3,316	12,657	12,732	45,424	48,998	87,300	96,074	1,611	1,928
East North Central	9,759	9,311	89,747	41,488	(D)	(D)	123,943	124,182	18,261	12,278
Ohio	2,202	2,137	8,131	8,243	9,664	10,051	24,505	26,465	4,029	3,927
Indiana	2,934	2,789	13,344	13,611	17,100	13,934	57,367	53,500	3,338	3,622
Illinois	1,856	1,818	8,210	8,620	(D)	(D)	21,035	22,128	782	672
Michigan	1,508	1,418	5,440	5,930	518	777	(D)	(D)	1,109	887
Wisconsin	1,260	1,154	4,622	5,084	14,885	15,183	21,036	22,089	4,003	3,170
West North Central	10,075	9,457	40,575	41,411	36,373	38,301	3 112,609	3 118,373	34,649	33,377
Minnesota	2,270	2,139	8,995	9,535	11,415	11,872	20,165	32,272	16,349	16,647
Iowa	3,046	2,843	9,186	9,921	2,659	2,606	(D)	(D)	5,013	5,778
Missouri	1,339	1,310	7,881	8,411	20,450	21,796	27,500	27,272	9,038	7,988
North Dakota	276	233	1,370	1,110	—	—	(D)	(D)	850	899
South Dakota	1,120	900	4,142	4,266	—	—	(D)	(D)	1,158	1,094
Nebraska	1,132	1,045	4,378	3,896	1,292	1,318	9,696	9,522	951	711
Kansas	892	897	4,043	4,272	557	709	6,572	6,401	395	360
South Atlantic	13,541	14,402	64,526	69,973	1,100,829	1,173,602	3 1,308,756	3 1,404,982	17,043	18,701
Delaware	127	129	632	650	114,873	133,503	(D)	(D)	167	150
Maryland	344	342	1,698	1,805	157,887	174,274	(D)	(D)	128	95
Virginia	1,118	1,125	5,342	5,075	56,985	63,460	70,506	76,041	4,067	4,185
West Virginia	329	321	1,280	1,220	16,460	16,542	(D)	(D)	1,080	677
North Carolina	3,035	3,405	14,806	15,398	282,872	280,637	297,354	328,351	8,276	9,419
South Carolina	1,184	1,149	5,052	5,103	19,543	24,219	26,953	30,400	1,525	2,540
Georgia	4,992	5,426	24,408	28,951	436,748	442,221	533,262	587,821	1,820	1,035
Florida	2,412	2,605	11,810	11,762	35,481	38,737	83,776	96,609	(4)	(4)
East South Central	7,103	6,925	36,808	38,268	583,604	627,083	3 1,325,825	3 1,443,553	923	754
Kentucky	697	654	3,010	3,191	8,987	7,190	(D)	(D)	115	58
Tennessee	1,172	1,129	4,971	5,220	42,100	46,132	42,231	43,055	26	15
Alabama	2,650	2,738	15,142	16,051	328,510	352,745	369,089	395,302	742	640
Mississippi	2,575	2,404	13,085	13,806	208,451	221,016	219,425	232,269	40	41
West South Central	7,569	7,473	38,116	38,836	608,944	648,504	(D)	(D)	21,008	20,918
Arkansas	3,298	3,418	18,005	19,757	390,947	414,623	438,751	512,126	6,802	6,661
Louisiana	817	839	3,860	3,640	42,776	46,706	46,651	45,321	9	6
Oklahoma	524	565	2,495	2,045	13,281	15,601	(D)	(D)	(4)	(4)
Texas	2,930	2,651	13,055	12,794	161,940	170,574	107,721	203,389	7,230	7,025
Mountain	1,459	1,469	6,298	6,447	(D)	(D)	3 18,013	3 20,308	(6)	(6)
Montana	212	221	1,116	1,015	—	—	(D)	(D)	1,483	1,575
Idaho	209	188	810	744	6,400	7,936	(D)	(D)	(4)	(4)
Wyoming	42	42	176	191	—	—	(D)	(D)	(4)	(4)
Colorado	308	320	1,533	1,717	—	—	1,090	2,422	2,303	2,442
New Mexico	159	192	771	964	—	—	(D)	(D)	(4)	(4)
Arizona	244	227	805	845	(D)	(D)	(D)	(D)	(4)	(4)
Utah	279	275	1,056	950	1,815	1,652	3,011	3,267	3,181	3,209
Nevada	6	4	31	31	—	—	(D)	(D)	—	—
Pacific	10,125	10,116	36,329	36,876	104,064	114,414	190,357	201,356	16,868	17,518
Washington	1,065	1,005	4,075	4,156	21,288	21,436	32,402	33,597	578	574
Oregon	661	526	2,162	2,143	13,750	14,700	18,285	18,082	1,937	1,812
California	8,287	8,380	20,274	29,859	87,604	76,757	139,670	149,677	14,853	15,132
Alaska	8	5	29	26	—	—	—	—	—	—
Hawaii	204	200	789	692	1,362	1,521	(D)	(D)	—	—

— Represents zero. D Withheld to avoid disclosure.

\* Vermont included with New Hampshire. <sup>2</sup> Rhode Island included with Massachusetts. <sup>3</sup> Includes data for States not available separately. <sup>4</sup> Florida, Idaho, New Mexico, Oklahoma, Arizona, and Wyoming included with Montana. <sup>5</sup> Mountain region included in West South Central to avoid disclosures.

## Agriculture

## No. 981. FATS AND OILS—SUPPLY, DISPOSITION, AND UTILIZATION: 1940 TO 1969

[In millions of pounds. Prior to 1960, excludes Alaska and Hawaii, except that exports and imports include Alaska, Hawaii, and Puerto Rico for all years. Includes fat content of butter]

ITEM	1940	1950	1955	1960	1965	1968	1969
Total supply	12,212	15,554	17,684	20,752	24,442	25,554	26,247
Production from domestic materials <sup>1</sup>	8,350	12,056	14,364	17,353	20,532	21,501	22,432
Imports and production from imported materials	1,651	1,320	1,056	1,074	1,189	1,385	1,410
Stocks, Jan. 1 <sup>2</sup>	2,211	2,178	2,204	2,325	2,721	2,668	2,405
Disposition:							
Exports <sup>3</sup>	423	2,045	4,102	5,965	7,481	7,350	7,163
Domestic disappearance <sup>4</sup>	9,298	11,523	11,600	12,649	14,638	15,790	16,413
Food uses <sup>5</sup>	6,143	7,016	7,658	8,241	9,524	10,592	10,790
Butter (fat content)	1,806	1,327	1,237	1,112	1,040	957	908
Lard (direct)	1,901	1,906	1,642	1,361	1,226	1,108	1,018
Shortening	1,196	1,705	1,988	2,302	2,768	3,326	3,495
Margarine	257	764	1,075	1,367	1,535	1,720	1,744
Other	982	1,314	1,717	2,094	2,055	3,481	3,624
Nonfood uses <sup>6</sup>	3,121	4,271	3,955	4,419	4,962	5,354	5,524

<sup>1</sup> Includes oil equivalent of cottonseed, soybeans, peanuts, and flaxseed exported for crushing abroad.

<sup>2</sup> Beginning 1950, excludes Government strategic stockpiling of coconut, palm, castor, and sperm oils.

<sup>3</sup> Includes commercial exports, voluntary or civilian relief, reexports, shipments to Puerto Rico, American Samoa, Guam, and Virgin Islands. <sup>4</sup> Beginning 1950, includes Government stockpiling.

<sup>5</sup> Domestic. Not adjusted for trade and change in stocks of shortening, margarine, soap, and secondaries.

Source: Dept. of Agriculture, Economic Research Service, *Fats and Oils Situation*; and Statistical Reporting Service. In annual report, *Agricultural Statistics*.

## No. 982. ANIMAL AND VEGETABLE FATS AND OILS: 1967 TO 1969

[In millions of pounds. Excludes Alaska and Hawaii. Covers factory operations only and, therefore, excludes considerable quantities of lard, tallow, and grease produced on farms and by local butcheries and small renderers; and quantities consumed and held in homes, hotels, restaurants, and bakeries, and by painters, building contractors, garages, etc. Stocks include amounts held by, and in transit to, producers, factory consumers, and public storages, but excludes amounts held in private storages by retailers, wholesalers, and jobbers]

PRODUCT	1967			1968			1969 (prel.)					
	Pro- duc- tion	Consump- tion <sup>1</sup>		Stocks, Dec. 31	Pro- duc- tion	Consump- tion <sup>1</sup>		Stocks, Dec. 31	Pro- duc- tion			
		In re- fining	In prod- ucts			In re- fining	In prod- ucts					
<b>Vegetable oils:</b>												
Cottonseed, crude	1,108	1,118	(X)	84	1,115	1,057	(X)	113	1,426	1,325	(X)	111
Cottonseed, refined <sup>2</sup>	1,051	(X)	1,011	168	1,002	(X)	910	160	1,262	(X)	890	288
Peanut, crude	176	176	(X)	7	200	205	(X)	12	188	154	(X)	8
Peanut, refined <sup>2</sup>	165	(X)	176	7	197	(X)	206	6	149	(X)	157	6
Corn, crude	444	452	(NA)	21	453	404	(X)	21	466	472	(X)	35
Corn, refined <sup>2</sup>	418	(X)	420	17	430	(X)	440	19	438	(X)	441	18
Soybean, crude	6,150	5,282	(X)	408	6,150	5,487	(X)	305	6,805	6,093	(X)	275
Soybean, refined <sup>2</sup>	5,073	(X)	5,203	257	5,228	(X)	5,411	283	5,860	(X)	5,048	242
Coconut, crude	351	601	(X)	118	392	586	(X)	178	386	581	(X)	187
Coconut, refined <sup>2</sup>	585	(X)	766	16	552	(X)	726	19	548	(X)	733	146
Tall, crude	1,211	(D)	(X)	112	1,239	69	(X)	135	1,239	111	(X)	131
Tall, refined <sup>2</sup>	148	(X)	1,309	60	146	(X)	1,288	50	154	(X)	1,269	39
Linseed, raw and boiled	371	264	(X)	168	307	241	(X)	126	282	241	(X)	90
Linseed, all other	(NA)	(X)	210	46	(NA)	(X)	194	31	(NA)	(X)	194	30
Chinawood or tung	(D)	(X)	30	71	(D)	(X)	27	61	(X)	(X)	31	55
Castor <sup>3</sup>	(D)	(X)	122	146	(D)	(X)	133	108	(X)	(X)	182	123
Palm <sup>4</sup>	(X)	(X)	86	17	(X)	(X)	97	29	(X)	(X)	148	35
Palm kernel, crude	(X)	100	(X)	16	(X)	90	(X)	24	(X)	74	(X)	22
Palm kernel, refined <sup>2</sup>	91	(X)	87	70	(X)	90	(X)	65	(X)	70	(X)	40
<b>Animal fats and fish oils:</b>												
Lard <sup>5</sup>	2,045	(X)	723	151	2,029	(X)	777	94	1,881	(X)	580	70
Tallow, edible <sup>1</sup>	578	(X)	525	73	538	(X)	517	50	535	(X)	511	46
Tallow and grease, inedible <sup>2</sup>	4,753	(X)	2,402	425	4,745	(X)	2,478	359	4,655	(X)	2,595	348
Fish oils <sup>6</sup>	118	(X)	36	80	171	(X)	30	105	172	(X)	34	40

<sup>1</sup> Withheld to avoid disclosure of individual company data. NA Not available. X Not applicable.

<sup>2</sup> Includes hydrogenated fats and other fats and oils "in process"; includes crude oils used directly in products.

<sup>3</sup> Production includes once-refined only (alkali or caustic washed); stocks include hydrogenated oils and other "in process" oils.

<sup>4</sup> Production is quantity rendered; consumption and stocks include both rendered and refined.

<sup>5</sup> Includes data for menhaden, sardine, and fish oils other than cod and cod liver.

Source: Dept. of Commerce, Bureau of the Census; *Current Industrial Reports*, Series M 20K-13.

## Section 24

### Forests and Forest Products

This section presents basic statistics on the area and ownership of commercial forest land, and on the annual growth, cut, and volume of timber on this land; forestry statistics covering the national forests and Forest Service cooperative programs; product statistics for lumber, pulpwood, wood pulp, paper and board, turpentine, rosin, and veneer logs; and other similar data.

The principal sources of these data are *Timber Trends in the United States*, issued in 1965 by the Forest Service of the Department of Agriculture, and *The Demand and Price Situation for Forest Products, National Forest System*, and *Forest Fire Statistics*, issued annually by the Forest Service; and reports of the quinquennial Census of Manufactures and the monthly and quarterly *Current Industrial Reports*, issued by the Bureau of the Census. Additional information in this field is published in the *Annual Report* of the National Forest Reservation Commission, the *Annual Naval Stores Report* of the Department of Agriculture's Statistical Reporting Service, the monthly *Survey of Current Business* of the Office of Business Economics, and the monthly *Fingertip Facts and Figures* of the National Forest Products Association, Washington, D.C.

The Bureau of the Census also collects statistics on foreign trade of forest products. The Bureau of Labor Statistics publishes monthly and annual statistics of wholesale lumber prices. Information on the domestic movement of forest products is collected by the Interstate Commerce Commission and the Association of American Railroads.

The completeness and reliability of statistics on forests and forest products vary considerably. The data for forest land area and stand are, of course, much more reliable for areas which have been surveyed than for those which have not been surveyed. Estimates of fire damage or causes of fires are not completely reliable, although forest fire statistics for Federal lands are considered much better than those for private lands. In the field of forest products, much more data are available for lumber production and other manufactured products such as veneer and plywood, pulp and paper, naval stores, etc., than for the primary forest products such as poles and piling, fuelwood, and fence posts.

**Historical statistics.**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1957*. See preface.

## No. 983. FOREST LAND—TOTAL AND COMMERCIAL AREA AND VOLUME OF SAWTIMBER: 1938 TO 1963

[Area in millions of acres; sawtimber in billions of board feet. As of January 1. Prior to 1963, excludes Alaska and Hawaii, except total forest land and all ownership in 1953. Net volume of sawtimber also includes Alaska for 1953. For composition of regions, see table 980.]

YEAR AND REGION	Total forest land	COMMERCIAL FOREST LAND, OWNERSHIP <sup>1</sup>				NET VOLUME OF SAWTIMBER <sup>2</sup>		
		All own- erships	Fed- erally owned or managed	State, county, and municipal	Private	Total	Soft- wood	Hard- wood
United States, 1938	630	462	121	(*)	341	1,764	1,493	271
United States, 1945	624	461	89	27	345	1,601	1,296	305
North	212	170	11	19	140	220	66	165
South	137	183	14	2	167	338	194	144
West	225	107	64	6	38	1,043	1,037	6
United States, 1953	772	530	99	27	358	2,057	1,648	409
North	199	174	13	19	142	266	59	207
South	197	193	14	2	177	367	183	174
West	376	163	72	5	40	1,434	1,406	28
United States, 1963	759	509	113	29	367	2,537	2,058	479
North	178	172	13	19	140	310	67	243
South	220	201	14	3	184	412	225	181
West	360	186	87	6	43	1,815	1,787	48

<sup>1</sup> For definition of commercial forest land, see headnote, table 986.

<sup>2</sup> See footnote 1, table 986.

<sup>3</sup> Included with federally owned or managed.

Source: Dept. of Agriculture; Forest Service; *A Reappraisal of the Forest Situation; Timber Trends in the United States, 1966*; and *Timber Resources for America's Future*.

## No. 984. NATIONAL FOREST LANDS AND PURCHASES: 1940 TO 1969

[Area as of June 30; purchases for years ending June 30. Includes Puerto Rico. Lands to be purchased must be approved by National Forest Reservation Commission, which also sets prices on such lands. Actual purchases are made by Department of Agriculture. See also *Historical Statistics, Colonial Times to 1967*, series L 1-6]

ITEM	1940	1950	1955	1960	1965	1967	1968	1969
Gross area <sup>1</sup> —mil. acres—	228	229	236	227	226	228	227	226
National Forest System lands								
mil. acres—	177	181	188	188	187	187	187	187
Gross area approved for purchase, acres	553,077	61,078	18,665	7,845	28,507	104,507	112,787	126,341
Average price per acre	\$3.98	\$8.71	\$10.30	\$14.76	\$46.67	\$67.34	\$83.47	\$97.77
Total price	\$1,000	2,203	532	192	114	1,381	7,037	9,413
Purchase completed	659,572	96,963	12,063	7,547	33,230	144,685	114,888	123,563
Average price per acre	\$4.14	\$7.28	\$12.23	\$31.21	\$88.97	\$87.98	\$70.66	\$83.48
Total price	\$1,000	2,738	708	148	237	1,205	12,715	8,118
Gross area of purchase units								
1,000 acres—	53,051	53,211	62,169	55,858	55,551	55,847	55,867	55,966
Purchase completed, net area <sup>2</sup>								
1,000 acres—	17,027	18,574	18,837	18,012	19,000	19,193	19,293	19,430
Average price per acre	\$3.76	\$3.83	\$3.87	\$3.95	\$4.16	\$4.95	\$5.38	\$5.55
Total price	\$1,000	63,991	71,206	72,883	74,762	79,047	95,061	113,757

<sup>1</sup> Comprises all publicly and privately owned land within authorized boundaries of national forests, purchase units, experimental areas and land utilization projects.

<sup>2</sup> Excludes lands in process of acquisition.

<sup>3</sup> Cumulative total.

Source: Dept. of Agriculture, Forest Service; annual report, *National Forest System*, and National Forest Reservation Commission; *Annual Report*.

## No. 985. FOREST TREE DISTRIBUTION PROGRAM AND COSTS: 1930 TO 1969

[For years ending June 30, except calendar years for trees, 1930 to 1945. Excludes Alaska; includes Puerto Rico]

YEAR	Trees distrib- uted (1,000)	COSTS (\$1,000)			YEAR	Trees distrib- uted (1,000)	COSTS (\$1,000)		
		Total	Federal contri- bution	State ex- penditure			Total	Federal contri- bution	State ex- penditure
1930	25,836	403	81	322	1960	844,599	6,573	186	6,387
1935	26,150	206	55	151	1965	508,651	6,865	216	6,649
1940	87,468	482	98	384	1966	521,440	6,812	219	6,593
1945	37,743	572	114	458	1967	572,088	7,989	220	7,709
1950	136,395	1,503	189	1,314	1968	573,067	8,528	224	8,304
1955	490,571	3,929	372	3,557	1969 (prel.)	823,986	10,114	204	9,911

Source: Dept. of Agriculture, Forest Service. In annual report, *Agricultural Statistics*.

**NO. 986. FOREST LAND—AREA OF COMMERCIAL FOREST LAND, BY OWNERSHIP, AND VOLUME OF SAWTIMBER AND GROWING STOCK, BY STATES: 1963**

[As of January 1. Commercial forest land comprises all land which was (a) producing, or physically capable of producing, usable crops of industrial wood, (b) economically available on date shown or prospectively, and (c) not withdrawn from timber utilization]

STATE	Total forest land (1,000 acres)	COMMERCIAL FOREST LAND, OWNERSHIP (1,000 acres)			SAWTIMBER, NET <sup>1</sup> (mil. bd. ft. int'l. 1/4 inch log rule)		GROWING STOCK, NET, <sup>2</sup> (mil. cu. ft.)	
		Total	Federal	State, county, municipal	Private	Soft-wood	Hard-wood	Soft-wood
<b>United States</b>	<b>758,865</b>	<b>503,845</b>	<b>113,176</b>	<b>28,692</b>	<b>366,977</b>	<b>2,058,022</b>	<b>478,777</b>	<b>434,082</b>
North	178,440	171,789	12,508	19,499	139,782	66,627	243,147	31,306
New England	31,886	31,461	906	905	29,640	30,368	21,060	16,003
Connecticut	1,990	1,973	1	154	1,818	190	2,087	117
Maine	17,425	17,189	66	139	16,964	20,657	10,625	11,679
Massachusetts	3,288	3,259	29	370	2,860	851	1,702	510
New Hampshire	5,019	4,907	579	118	4,210	5,859	3,152	2,537
Rhode Island	434	430	—	26	404	27	165	17
Vermont	3,730	3,713	231	98	3,384	2,784	6,329	1,143
Middle Atlantic	46,646	43,888	1,538	4,170	38,180	13,744	89,960	5,664
Delaware	392	391	1	8	382	546	709	238
Maryland	2,920	2,897	54	160	2,683	1,669	7,123	838
New Jersey	2,229	2,120	17	237	1,866	604	2,939	314
New York	14,450	12,002	98	797	11,107	7,009	24,974	2,757
Pennsylvania	15,188	15,089	485	2,815	11,789	2,351	26,381	665
West Virginia	11,460	11,389	883	153	10,353	1,565	28,884	567
Lake	55,211	52,392	7,554	13,687	31,151	18,213	41,492	8,356
Michigan	19,699	19,121	2,540	3,780	12,801	7,400	19,098	3,233
Minnesota	19,037	17,056	2,813	6,720	7,523	6,560	8,959	3,607
North Dakota	439	424	118	10	296	—	637	—
South Dakota (east)	438	395	173	21	201	52	705	11
Wisconsin	15,588	15,306	1,910	3,166	10,330	4,201	12,005	1,490
Central	44,697	44,058	2,510	737	40,811	4,302	87,635	1,289
Illinois	3,871	3,761	229	11	3,521	28	8,648	16
Indiana	4,018	3,960	177	117	3,666	62	12,603	33
Iowa	2,620	2,695	13	24	2,558	6	6,188	4
Kansas	1,668	1,664	1	—	1,663	10	4,270	1,149
Kentucky	10,891	10,840	575	77	10,188	2,485	26,776	671
Missouri	15,296	14,977	1,361	224	13,392	879	11,733	388
Nebraska	1,162	1,140	86	12	1,062	423	1,249	104
Ohio	5,171	5,121	88	272	4,761	409	18,368	114
South	220,304	201,069	14,062	2,820	184,187	224,787	187,313	62,688
South Atlantic	48,994	47,604	3,361	606	43,637	54,697	62,557	17,053
North Carolina	20,862	20,216	1,247	290	18,679	28,006	27,437	8,445
South Carolina	11,640	11,559	837	176	10,546	13,990	11,001	4,258
Virginia	16,492	15,820	1,277	140	14,412	12,701	24,419	4,360
East Gulf	46,269	44,772	3,314	715	40,743	44,661	28,229	14,854
Florida	10,904	18,474	1,640	580	16,254	15,253	6,781	4,758
Georgia	26,365	26,298	1,674	135	24,489	29,408	18,448	10,096
Central Gulf	53,685	53,361	2,900	1,019	49,442	49,746	43,873	13,379
Alabama	21,770	21,742	799	202	20,741	28,307	18,295	7,673
Mississippi	18,008	17,976	1,267	452	16,257	17,111	9,253	6,775
Tennessee	13,907	13,643	834	365	12,444	4,328	16,325	1,282
West Gulf	71,356	55,332	4,487	480	50,365	75,653	55,354	17,402
Arkansas	21,591	21,630	2,641	205	18,684	26,368	15,985	5,000
Louisiana	16,576	16,512	704	181	15,627	25,140	27,140	5,704
Oklahoma	9,235	5,299	423	60	4,816	2,483	2,271	618
Texas	23,954	11,991	719	34	11,238	21,667	9,958	5,171
West	360,121	135,987	86,606	6,373	43,008	1,766,638	48,317	340,088
Pacific Northwest	172,276	51,884	29,123	3,269	19,492	1,055,470	36,459	191,867
Alaska	118,487	5,761	5,585	146	30	180,930	1,025	34,718
Oregon	30,739	26,613	15,379	928	10,311	515,879	20,430	89,203
Washington	23,050	19,510	8,159	2,200	9,151	358,681	14,404	67,046
Pacific Southwest	44,523	18,480	9,162	681	8,637	302,298	2,336	54,861
California	42,541	17,391	9,153	194	8,044	302,288	1,614	54,861
Hawaii	1,982	1,080	9	487	593	722	—	220
Northern Rocky Mt.	55,039	39,287	28,467	1,753	9,067	269,645	1,547	60,855
Idaho	21,815	15,823	11,817	940	3,068	126,484	317	26,244
Montana	22,048	17,300	11,801	639	4,880	111,798	888	26,488
South Dakota (west)	1,399	1,311	968	63	282	3,423	7	991
Wyoming	9,777	4,858	3,883	111	859	27,939	385	7,134
Southern Rocky Mt.	88,283	26,336	19,854	670	5,812	139,225	7,975	32,605
Arizona	19,902	3,870	3,701	94	135	28,098	189	6,116
Colorado	22,553	12,275	8,907	235	3,133	60,477	3,781	14,897
Nevada	12,036	109	32	—	77	565	7	25
New Mexico	18,807	6,083	4,118	161	1,804	29,872	1,870	6,875
Utah	14,955	3,990	3,098	240	683	20,213	2,128	4,490

<sup>1</sup> Represents zero. <sup>2</sup> Comprises species which contain at least 1 saw log defined as follows: Softwoods must be at least 9.0 inches in diameter, breast height, except in Calif., Oreg., Wash., and coastal Alaska where the minimum diameter is 11.0 inches. Hardwoods must be 11.0 inches in all States. <sup>3</sup> Comprises all live sawtimber trees, poletimber trees, saplings, and seedlings meeting specified standards of quality or vigor; excludes cull trees.

## No. 987. NATIONAL FORESTS—SUMMARY: 1940 TO 1969

(Money figures in thousands of dollars. For years ending June 30, except as noted. Includes Alaska and Puerto Rico, except as noted. See also *Historical Statistics, Colonial Times to 1957*, series J 41-42 and L 7-22)

ITEM	1940	1950	1955	1960	1965	1967	1968	1969
Livestock grazing: <sup>1</sup>								
Cattle, horses, and swine <sup>2</sup>	1,000	1,314	1,128	1,148	1,307	1,376	1,521	1,531
Sheep and goats	1,000	4,068	3,013	2,830	2,574	2,112	2,264	2,162
Roads and trails:								
Road construction and reconstr. <sup>3</sup> miles	3,054	453	767	851	1,613	4,1435	4,1270	4,1447
Trail construction and reconstr. <sup>3</sup> miles	2,221	828	184	142	671	701	654	644
Expenditures (maint. and constr.)	23,511	15,036	29,413	43,151	105,472	119,309	122,608	114,560
Timber cut, total value <sup>4</sup>	5,168	31,140	71,231	157,094	161,880	189,563	240,226	327,944
Commercial and cost sales: <sup>5</sup>								
Volume	1,740	3,602	6,328	9,367	11,244	10,851	12,120	11,783
Value	4,807	30,714	70,761	155,424	161,106	188,711	239,311	326,097
Free use:								
Volume	326	121	106	123	191	170	175	168
Value <sup>6</sup>	304	215	204	216	280	277	293	282
Misc. forest products, value	57	211	266	454	494	575	622	605
Receipts, total	5,859	34,485	70,521	146,348	147,411	182,664	216,389	310,167
Timber use	3,043	30,269	75,044	139,903	138,769	172,789	205,600	305,811
Grazing use	1,463	3,385	2,953	3,665	3,040	3,588	3,499	3,842
Special land use, water power, etc.	453	831	1,524	2,780	5,602	6,287	7,281	8,514
Payments to States and Puerto Rico <sup>7</sup>	1,466	8,478	19,573	35,672	35,757	44,164	52,562	78,398
25-percent fund	1,433	8,368	19,413	35,222	35,295	43,516	51,820	77,401
Ariz. and N. Mex. school fund	23	72	114	140	112	108	90	125
Minnesota	-	44	46	123	141	146	146	268
Alaska ("Tongass suspense account") <sup>8</sup>	-	(NA)	(NA)	187	210	396	506	562
Allotments to Forest Service <sup>9</sup>	678	3,484	7,776	14,176	14,255	17,622	20,960	31,250

<sup>1</sup> Represents zero. NA Not available.

<sup>2</sup> Number permitted to graze. Beginning 1960, figures include national grasslands and land utilization project lands. Calendar-year data. Excludes Puerto Rico. <sup>3</sup> Excludes animals under 6 months of age.

<sup>4</sup> Includes forest highway construction. <sup>5</sup> Includes national grasslands.

<sup>6</sup> Includes all National Forest system lands. <sup>7</sup> Includes land exchanges.

<sup>8</sup> Includes some free use timber not reducible to board feet. <sup>9</sup> Payments made in following year.

<sup>10</sup> Total for 1948 through 1956 was \$697,133. <sup>10</sup> For use in following year.

Source: Dept. of Agriculture, Forest Service. In annual report, *Agricultural Statistics*, and unpublished data.

## No. 988. NATIONAL FOREST AND OTHER LANDS—AREA AND PURCHASES, STATES AND PUERTO RICO: 1969

(In thousands of acres. Gross area within unit boundaries as of June 30; purchases cumulative to June 30. See headnote, table 984. See also *Historical Statistics, Colonial Times to 1957*, series L 1-2]

STATE	GROSS AREA <sup>1</sup>		Purchases completed, gross area	STATE OR OTHER AREA	GROSS AREA <sup>1</sup>		Purchases completed, gross area
	Total	National Forest System			Total	National Forest System	
<b>Total</b>	<b>226,045</b>	<b>186,632</b>	<b>55,966</b>	Nebraska	441	350	-
Alabama	1,270	632	1,253	Nevada	5,410	5,074	3,896
Alaska	20,777	20,723	-	New Hampshire	805	889	805
Arizona	12,093	11,437	-	New Mexico	10,222	9,192	93
Arkansas	3,494	2,449	3,432	New York	14	14	-
California	24,320	20,040	2,905	North Carolina	3,166	1,128	3,163
Colorado	15,837	14,334	-	North Dakota	1,105	1,105	(z)
Connecticut	(z)	(z)	-	Ohio	1,455	132	1,455
Florida	1,225	1,030	1,223	Oklahoma	400	288	266
Georgia	1,912	813	1,538	Oregon	17,346	15,460	72
Idaho	21,614	20,352	1,728	Pennsylvania	742	494	742
Illinois	837	237	837	South Carolina	1,374	591	1,374
Indiana	724	140	723	South Dakota	2,265	1,983	1
Iowa	(z)	(z)	-	Tennessee	1,213	608	1,212
Kansas	108	108	5	Texas	1,834	776	1,182
Kentucky	2,003	548	2,003	Utah	9,145	8,023	3,179
Louisiana	1,017	593	-	Vermont	629	239	629
Maine	94	50	93	Virginia	3,230	1,512	3,225
Michigan	4,795	2,666	4,777	Washington	10,041	9,044	1
Minnesota	5,042	2,780	5,042	West Virginia	1,855	937	1,855
Mississippi	2,312	1,135	2,130	Wisconsin	1,973	1,486	1,973
Missouri	3,022	1,416	3,009	Wyoming	9,716	9,275	-
Montana	19,053	18,670	1	Puerto Rico	66	28	186

<sup>1</sup> Represents zero. Z Less than 500 acres. <sup>1</sup> See footnote 1, table 984.

Source: Dept. of Agriculture, Forest Service; annual report, *National Forest System*, and National Forest Reservation Commission; *Annual Report*.

# Forest Fires—Lumber Production

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## No. 989. FOREST FIRES—SUMMARY: 1950 TO 1969

[Area in thousands of acres; expenditures in thousands of dollars. See also *Historical Statistics, Colonial Times to 1957*, series L 100-109]

ITEM	1950	1955	1960	1965	1966	1967	1968	1969
Federal, protected area: <sup>1</sup>								
Forest area <sup>2</sup> .....	212,622	216,728	362,838	655,001	655,443	654,601	650,039	651,827
Number of fires.....	8,418	6,830	12,090	9,073	11,571	11,405	10,027	10,112
Area burned.....	3,391	4,304	622	146	1,265	342	1,205	4,112
State and private: <sup>3</sup>								
Forest area.....	426,694	431,100	434,830	502,317	516,076	517,210	515,000	543,092
Protected <sup>4</sup> .....	360,564	387,156	402,800	472,023	469,328	479,623	486,461	511,965
Unprotected.....	66,130	43,053	32,030	30,294	46,748	37,587	28,539	31,127
Number of fires.....	199,982	138,350	91,207	104,611	110,929	113,530	115,344	103,239
Protected.....	96,578	80,774	77,537	91,495	98,167	102,267	107,689	97,393
Unprotected.....	103,404	57,576	13,760	13,116	12,772	11,263	7,655	5,846
Area burned.....	15,127	7,424	3,856	2,506	3,809	4,318	3,027	2,577
Protected.....	3,407	2,448	1,009	1,208	1,008	1,926	1,633	1,582
Unprotected.....	11,720	4,976	1,947	1,300	1,401	2,390	1,394	995
Fire protection expenditures <sup>5</sup> .....	428,034	439,216	456,641	76,562	85,858	90,964	96,070	100,955
Federal.....	8,551	8,945	9,401	12,783	12,803	12,834	14,357	14,396
State and county.....	18,121	28,168	45,059	62,612	71,812	76,626	80,464	85,222
Private agencies.....	2,262	2,103	2,181	1,167	1,243	1,504	1,249	1,337
Total fires.....	208,588	145,204	103,387	113,684	122,500	125,025	125,371	103,239
On protected areas.....	105,182	87,688	89,627	100,508	109,728	113,702	117,718	97,393
Percent of total.....	50.4	60.4	80.7	88.5	80.6	91.0	93.9	94.3
Lightning.....	6,518	6,282	11,068	8,730	10,232	10,335	9,066	2,761
Campfires.....	3,802	3,924	3,614	3,404	3,666	3,405	2,986	2,430
Smoking.....	18,287	15,882	16,030	16,517	16,807	16,844	17,182	13,751
Debris burning.....	18,768	20,338	21,870	22,882	26,726	28,253	31,192	27,112
Incendiary (arson).....	40,127	25,775	21,162	26,800	28,388	33,116	32,417	30,548
Machine use.....	(NA)	(NA)	(NA)	6,784	8,509	8,703	8,882	8,041
Miscellaneous <sup>6</sup> .....	17,680	15,487	15,883	15,441	15,400	13,046	16,511	12,760

NA Not available.

<sup>1</sup> Comprises national forests, public domain, land administered by Dept. of the Interior, Soil Conservation Service, Tennessee Valley Authority, etc.

<sup>2</sup> Beginning 1964, includes nonforest watershed areas under Dept. of the Interior protection.

<sup>3</sup> Excludes Alaska and Hawaii.

<sup>4</sup> Excludes Alaska.

<sup>5</sup> Prior to 1960, excludes Alaska.

<sup>6</sup> Includes nonforest watershed areas.

<sup>7</sup> For fire protection on State and private forest lands only, years ending June 30.

<sup>8</sup> Prior to 1965, lumbering and railroads included in "Miscellaneous"; thereafter, in various other classifications.

Source: Dept. of Agriculture, Forest Service; annual report, *Forest Fire Statistics*, and unpublished data.

## NO. 990. LUMBER PRODUCTION, BY GEOGRAPHIC DIVISIONS: 1966 TO 1968

[Production in millions of board feet, lumber tally. Data are based in part on a sample of sawmills and are estimates which may vary from the figures which would be obtained from a complete census. For composition of divisions, see fig. 1, p. xii. See *Historical Statistics, Colonial Times to 1957*, series L 36-44, for data by regions]

GEOGRAPHIC DIVISION	1966			1967			1968 (prel.)		
	Production	Percent	Stand- ard error <sup>1</sup> (per- cent)	Production	Percent	Stand- ard error <sup>1</sup> (per- cent)	Production	Percent	Stand- ard error <sup>1</sup> (per- cent)
United States.....	36,584	100.0	(2)	35,602	100.0	(2)	37,450	100.0	(2)
New England.....	684	1.9	(2)	654	1.8	(2)	665	1.8	(2)
Middle Atlantic.....	896	2.4	(2)	882	2.5	(2)	899	2.4	(2)
East North Central.....	1,198	3.3	(2)	1,195	3.3	(2)	1,222	3.3	(2)
West North Central.....	587	1.6	(2)	595	1.7	(2)	592	1.6	(2)
South Atlantic.....	5,375	14.7	(2)	5,204	14.6	(2)	5,248	14.0	(2)
East South Central.....	3,384	9.2	(2)	3,275	9.2	(2)	3,350	8.9	(2)
West South Central.....	3,250	8.9	(2)	3,131	8.8	(2)	3,198	8.5	(2)
Mountain.....	4,223	11.5	(2)	4,230	11.9	(2)	4,525	12.1	(2)
Pacific.....	16,987	46.4	(2)	16,436	46.2	(2)	17,750	47.4	(2)

<sup>1</sup> See Technical Note, p. 695, for explanation of standard error. <sup>2</sup> 5 percent or less

<sup>3</sup> More than 5 percent but not exceeding 10 percent. <sup>4</sup> More than 10 percent but not exceeding 15 percent

Source: Dept. of Commerce, Bureau of the Census; reports of Census of Manufactures and *Current Industrial Reports*, Series M24T.

## No. 991. LUMBER PRODUCTION, BY KIND OF WOOD: 1950 to 1968

[In millions of board feet, lumber tally. Prior to 1963, excludes Alaska and Hawaii. Based on sample surveys; see source for sampling variability. See also *Historical Statistics, Colonial Times to 1957*, series L 46-60]

KIND OF WOOD	1950	1955	1960	1963	1964	1965	1966	1967	1968 (prel.)
Total	38,007	37,380	32,926	34,706	36,559	36,762	36,584	35,602	37,450
Softwoods	30,633	29,815	26,672	27,552	29,284	29,295	28,847	28,172	30,223
Cedar	1,313	(S)	(S)	556	651	633	610	578	618
Douglas fir	9,984	10,414	8,832	8,353	8,858	8,783	8,528	8,226	8,955
Hemlock	1,508	1,508	2,032	2,486	2,490	2,576	2,490	2,413	2,408
Larch	246	346	418	390	431	441	421	405	421
Ponderosa pine	3,805	3,663	3,169	3,516	3,729	3,776	3,808	3,788	3,981
Redwood	875	961	1,000	1,138	1,199	1,087	1,038	938	1,051
Southern yellow pine	9,939	7,360	5,660	6,055	6,414	6,028	6,609	6,511	6,901
Engelmann and sitka	(NA)	(NA)	471	529	626	641	666	686	757
Sugar pine	425	390	408	463	467	464	507	498	566
White fir	1,114	2,059	2,224	2,158	2,540	2,422	2,321	2,273	2,591
White pine	1,292	1,105	(S)	1,933	2,1,135	2,1,151	2,1,111	2,1,085	2,1,111
Other softwoods	1,072	777	675	975	734	693	738	773	883
Hardwoods <sup>a</sup>	7,374	7,565	6,254	7,154	7,275	7,467	7,737	7,430	7,227
Ash	81	125	125	143	138	141	154	140	132
Basswood	( <sup>b</sup> )	119	92	92	69	87	90	77	68
Beech	325	226	195	166	176	182	175	163	157
Birch	137	144	126	107	121	109	104	99	95
Cottonwood <sup>c</sup>	225	327	206	192	205	198	211	202	190
Elm	( <sup>d</sup> )	198	195	200	204	200	208	200	210
Maple	546	568	602	556	642	786	688	715	700
Oak	8,347	8,716	2,789	3,170	3,417	3,356	3,675	3,424	3,818
Sweet (red and sap) gum	758	529	331	418	380	387	434	385	364
Tupelo and black gum	342	304	292	398	381	385	352	344	335
Yellow poplar	833	690	592	644	645	681	692	666	682
Other hardwoods	780	559	593	1,068	899	949	984	1,008	996

<sup>a</sup> Not available. <sup>b</sup> Suppressed; standard error more than 15 percent.

<sup>c</sup> Incense, Port Orford, and western red cedar only; eastern red cedar included in "Other softwoods."

<sup>d</sup> Standard error more than 15 percent. <sup>e</sup> Beginning 1960, includes estimate for western hardwoods, not reported by species. <sup>f</sup> Included in "Other hardwoods." <sup>g</sup> Includes aspen.

Source: Dept. of Commerce, Bureau of the Census; reports of Census of Manufactures and *Current Industrial Reports*, Series M24T.

## No. 992. LUMBER PRODUCTION, CONSUMPTION, STOCKS, EXPORTS, AND IMPORTS: 1950 to 1969

[In millions of board feet, except ratios. Excludes Alaska and Hawaii, except as noted. See *Historical Statistics, Colonial Times to 1957*, series L 28-35, for series from Bureau of the Census and Forest Service]

ITEM	1950	1955	1960	1965	1966	1967	1968 (prel.)	1969 (prel.)
Production <sup>1</sup>	38,902	37,855	32,926	36,762	36,584	35,602	37,450	37,943
Softwoods	31,528	30,283	26,872	29,295	28,847	28,172	30,223	29,481
Hardwoods	7,374	7,565	6,254	7,467	7,737	7,430	7,227	8,462
Domestic consumption <sup>2</sup>	41,627	41,088	35,226	41,847	40,680	39,548	43,193	42,784
Softwoods	34,277	32,830	28,974	33,768	32,651	32,317	35,189	33,773
Hardwoods	7,350	8,258	6,252	8,081	8,029	7,231	8,004	9,011
Gross mill stocks, end of year	8,183	8,860	7,352	5,805	5,085	5,751	4,988	5,332
Softwoods	4,207	5,386	5,285	4,539	4,682	4,351	4,160	4,704
Hardwoods	1,978	3,288	2,007	1,066	1,033	1,400	888	828
Ratio, total mill stocks to total consumption	15	21	21	13	14	15	12	12
Softwoods	12	16	18	13	14	13	12	14
Hardwoods	27	40	33	13	13	19	10	7
Exports <sup>3</sup>	518	844	861	922	1,024	1,134	1,159	1,135
Softwoods	407	652	688	777	860	955	1,025	1,018
Hardwoods	111	189	173	145	164	179	135	117
Imports <sup>4</sup>	3,432	3,597	3,922	5,233	5,200	5,146	6,156	6,804
Softwoods	3,140	3,327	3,031	4,895	4,776	4,798	5,808	5,849
Hardwoods	283	266	291	388	424	348	348	456

<sup>1</sup> Beginning 1965, includes Alaska. <sup>2</sup> Represents shipments and net imports.

<sup>3</sup> Includes box shooks and railroad ties (sawed). Includes Alaska, Hawaii, and Puerto Rico.

Source: Compiled by Mackay-Shields Economics, Inc., New York, N.Y., from data supplied by National Forest Products Association, Washington, D.C.

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## No. 993. INDUSTRIAL TIMBER PRODUCTS FROM ROUNDWOOD—SUMMARY: 1940 TO 1969

[In millions of cubic feet. Excludes fuelwood. See also *Historical Statistics, Colonial Times to 1957*, series L 72-84]

ITEM	1940	1950	1960	1964	1965	1966	1967	1968	1969 (Prel.)
Total:									
Domestic production <sup>1</sup>	6,990	8,525	8,910	10,260	10,540	10,670	10,390	11,030	11,175
Imports	715	1,525	1,680	2,040	2,095	2,220	2,155	2,390	2,545
Exports	285	140	455	720	725	820	995	1,200	1,235
New supply <sup>2</sup>	7,420	9,995	10,080	11,535	11,830	12,080	11,490	12,260	12,560
Saw logs:									
Domestic production	<sup>3</sup> 4,845	<sup>3</sup> 5,905	<sup>3</sup> 5,080	5,640	5,670	5,645	5,440	5,765	5,810
Imports	115	535	615	815	815	810	800	980	1,015
Exports	150	80	135	160	145	160	175	180	170
New Supply	4,810	6,360	5,580	6,305	6,345	6,295	6,070	6,545	6,655
Veneer logs:									
Domestic production	235	345	705	980	1,030	1,030	995	1,035	1,010
Imports	(2)	5	60	90	95	110	110	160	195
Exports	5	(2)	(2)	5	5	10	10	10	25
New supply	230	350	765	1,045	1,115	1,135	1,095	1,185	1,180
Pulpwood:									
Domestic production	<sup>3</sup> 935	<sup>3</sup> 1,500	<sup>4</sup> 2,565	2,055	3,095	3,215	3,125	3,255	3,425
Imports	565	935	985	1,120	1,170	1,280	1,230	1,255	1,325
Exports	120	50	275	395	385	430	495	605	660
New supply	6,180	2,470	3,225	3,635	3,795	4,020	3,795	3,950	4,165
Logs:									
Imports	35	45	20	10	10	15	15	15	10
Exports	10	10	45	170	190	220	310	405	375
Other products <sup>3,4</sup>	965	770	510	540	500	565	515	570	555

Z Less than 500,000 cubic feet.

<sup>1</sup> Includes log exports.

<sup>2</sup> Includes log imports.

<sup>3</sup> Excludes Alaska and Hawaii.

<sup>4</sup> Excludes Hawaii.

<sup>5</sup> Excludes changes in stocks.

<sup>6</sup> Includes copverage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, etc.

Source: Dept. of Agriculture, Forest Service; *The Demand and Price Situation for Forest Products*.

## No. 994. ROUNDWOOD PRODUCTS—SOFTWOODS AND HARDWOODS, BY REGIONS: 1962

[In thousands of cubic feet. For States represented in regions shown, see table 086]

REGION	TOTAL <sup>1</sup>		SAW LOGS		VENEER		PULPWOOD		FUELWOOD	
	Soft-woods	Hard-woods	Soft-woods	Hard-woods	Soft-woods	Hard-woods	Soft-woods	Hard-woods	Soft-woods	Hard-woods
U.S.—	7,264,259	3,055,625	4,223,526	1,047,039	708,278	148,817	1,885,829	717,272	207,909	915,811
North—	574,171	1,377,891	191,907	446,218	245	39,561	309,845	286,331	32,464	467,319
South—	2,569,684	1,607,635	1,097,018	579,340	2,724	109,187	1,231,275	390,222	118,254	442,980
West—	4,120,404	70,099	2,934,601	21,481	705,300	60	344,709	40,719	57,181	5,512

<sup>1</sup> Includes miscellaneous industrial products, not shown separately.

Source: Dept. of Agriculture, Forest Service; *Timber Trends in the United States*, 1965.

## No. 995. STUMPPAGE AND LUMBER PRICES FOR SELECTED SPECIES: 1940 TO 1969

[In dollars per 1,000 board feet. See also *Historical Statistics, Colonial Times to 1957*, series L 85-91]

ITEM	1940	1950	1955	1960	1965	1967	1968	1969
<b>Stumpage prices:</b>								
Douglas-fir	2.30	16.40	28.00	32.00	42.60	41.70	61.20	82.20
Southern pine	4.50	26.70	32.00	34.50	31.70	38.30	42.20	51.70
Sugar pine	3.00	25.00	30.00	29.00	28.30	23.60	35.00	75.20
Ponderosa pine	2.20	18.30	26.10	19.10	19.80	22.20	30.20	71.00
Douglas-fir lumber prices, wholesale	22.20	73.30	80.90	75.00	76.10	(NA)	(NA)	(NA)

NA Not available.

Source: Dept. of Agriculture, Forest Service. In annual report, *Agricultural Statistics*.

No. 996. SELECTED TIMBER PRODUCTS—WHOLESALE PRICE INDEXES: 1940 TO 1969  
 [1957-59=100. 1960 and earlier years exclude Alaska and Hawaii. See *Historical Statistics, Colonial Times to 1957*, series L 92-96, for indexes on 1947-49 base]

YEAR	Lumber	Plywood <sup>1</sup>	Woodpulp	Paper	Paperboard
1940	28.0	38.5	42.1	44.3	35.7
1945	42.2	48.0	52.7	50.5	47.4
1950	93.9	122.9	79.4	74.7	77.1
1955	102.4	116.4	98.8	91.1	98.3
1960	99.8	90.6	100.2	102.0	99.4
1965	101.9	85.1	98.1	104.1	96.4
1966	108.5	89.4	98.0	107.3	97.1
1967	108.4	81.9	98.0	110.0	95.0
1968	127.3	100.4	98.0	112.2	91.1
1969	142.6	114.7	98.0	116.6	94.4

<sup>1</sup> Softwood plywood, interior grade A-D.

Source: Dept. of Labor, Bureau of Labor Statistics. Current data in *Monthly Labor Review*.

#### No. 997. MILLWORK AND WOOD PRODUCTS—PRODUCTION: 1950 TO 1969

ITEM	1950	1960	1965	1967	1968	1969 (prel.)
Hardwood flooring	... mil. bd. ft.	1,077	915	808	580	487
Softwood plywood	... mil. sq. ft., $\frac{3}{4}$ " basis	2,076	7,750	12,428	12,840	14,343
Insulation boards	... 1,000 short tons	838	1,098	1,258	1,201	1,357
Hardboard	... 1,000 short tons	381	686	1,093	963	1,231
Particleboard	... mil. sq. ft., $\frac{3}{4}$ " basis	(NA)	268	780	1,110	1,425
Softwood pine doors <sup>1</sup>	... 1,000 units	3,330	1,948	2,041	2,452	2,160
Hardwood doors <sup>1</sup>	... 1,000 units	1,221	3,763	5,807	6,335	5,081
Sash and window units <sup>1</sup>	... 1,000 units	9,414	7,058	8,891	7,963	8,177
Exterior frames and window units <sup>1</sup>	... 1,000 units	4,644	5,345	6,250	4,907	5,405

NA. Not available.

<sup>1</sup> Covers only reports of shipments from members of National Woodwork Manufacturers' Association.

Source: Dept. of Commerce, Business and Defense Services Administration; *Construction Review*. Data compiled from reports by various trade associations and Bureau of the Census.

#### No. 998. TURPENTINE, ROSIN, AND NAVAL STORES—PRODUCTION: 1940 TO 1970

[Turpentine and naval stores in thousands of barrels of 50 gallons; rosin in thousands of drums of 520 pounds net, except as noted. For crop years ending March 31. Excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1967*, series L 70-71]

PRODUCT	1940	1950	1960	1965	1968	1969	1970
Total turpentine	605	673	637	679	628	652	617
Gum	388	323	107	120	68	50	35
Wood	1,222	350	529	560	580	602	582
Steam distilled	150	200	178	157	140	120	103
Sulphate	57	148	353	402	420	473	480
Total resin	1,814	2,024	1,916	2,015	1,869	1,846	1,741
Gum <sup>2</sup>	1,054	925	334	303	223	171	119
Wood, steam distilled <sup>3</sup>	759	1,098	1,199	1,036	965	960	830
Tall oil	-	-	383	586	681	714	793
Other naval stores:							
Pine oil <sup>4</sup>	(NA)	141	197	234	285	289	278
Other terpenes	(NA)	74	94	125	100	101	99

<sup>1</sup> Represents zero. NA. Not available. <sup>2</sup> Includes "Destructively distilled."

<sup>3</sup> Thousands of drums of 517 pounds. <sup>4</sup> Beginning 1950, total primary production of FF wood rosin.

<sup>4</sup> Beginning 1965, data not comparable with earlier years due to change in reporting procedure.

Source: Dept. of Agriculture, Statistical Reporting Service; *Annual Naval Stores Report*.

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## No. 999. PLYWOOD AND PARTICLEBOARD—PRODUCTION AND SHIPMENTS: 1967 AND 1968

[Quantities in millions of square feet; value in thousands of dollars]

PRODUCT	1967		1968			
	Production	Shipments <sup>1</sup>		Production	Shipments <sup>1</sup>	
		Quantity	Value		Quantity	Value
Hardwood plywood.....						
surface measure.....	2,032	1,693	327,696	2,197	1,778	351,681
Veneer core, all types.....	1,724	1,550	(NA)	1,911	1,652	(NA)
Technical and type I, waterproof.....						
surface measure.....	42	20	(NA)	40	18	(NA)
Type II, moisture resistant.....						
surface measure.....	1,013	1,473	(NA)	1,802	1,573	(NA)
Type III, dry bond.....	89	57	(NA)	70	61	(NA)
Other core, all types.....	203	84	(NA)	199	83	(NA)
Container and packaging type.....						
surface measure.....	105	59	(NA)	87	43	(NA)
Softwood plywood.....	12,840	12,915	777,031	14,343	14,451	1,064,320
$\frac{3}{4}$ " basis.....						
Interior type.....	6,837	6,919	387,381	6,912	7,035	473,311
Exterior type.....	6,003	5,990	389,650	7,431	7,417	591,009
Particleboard.....	1,115	1,051	97,052	1,425	1,368	141,478
Platen.....	1,074	(NA)	(NA)	1,391	(NA)	(NA)
Extruded.....	41	(NA)	(NA)	34	(NA)	(NA)

NA Not available. <sup>1</sup> Includes interplant transfers.

Source: Dept. of Commerce, Bureau of the Census; *Current Industrial Reports*, Series M24F, M24H, and M24L.

## No. 1000. PULPWOOD PRODUCTION AND CONSUMPTION AND WOODPULP PRODUCTION: 1950 TO 1969

[Cords of 128 cubic feet. Excludes Alaska and Hawaii, except as noted. See also *Historical Statistics, Colonial Times to 1967*, series L 61 and L 64]

YEAR	PULPWOOD <sup>1</sup>			WOODPULP PRODUCTION <sup>3</sup>					
	Production <sup>2</sup>	Consumption			Total	Sulphate			Ground-wood
		Total	Soft-wood	Hard-wood		Un-bleached	Bleached and semi-bleached		
1950.....	1,000 cords	1,000 cords	1,000 cords	1,000 short tons	1,000 short tons	1,000 short tons	1,000 short tons	1,000 short tons	1,000 short tons
1950.....	20,712	23,627	20,406	3,221	14,840	5,709	1,793	2,216	5,132
1955.....	30,948	33,356	27,728	5,628	20,740	7,065	3,025	2,720	6,720
1957.....	34,422	35,746	29,446	6,300	21,800	7,651	4,284	3,089	6,776
1958.....	33,230	35,144	28,833	6,311	21,706	7,647	4,669	2,890	6,580
1959.....	36,716	38,691	30,885	7,806	24,383	8,540	5,280	3,230	7,324
1960.....	40,011	40,486	32,061	8,424	26,316	8,681	5,900	3,292	7,434
1961.....	40,272	42,191	33,095	9,097	26,523	9,115	6,307	3,208	7,892
1962.....	42,772	44,070	34,193	9,877	27,908	9,517	6,784	3,397	8,210
1963.....	44,708	46,435	35,661	10,774	30,121	10,502	7,430	3,468	8,712
1964.....	49,219	50,659	39,329	11,330	32,415	11,851	8,251	3,696	8,717
1965.....	53,208	51,970	39,676	12,294	33,993	12,698	8,811	3,595	8,889
1966.....	57,064	56,260	42,857	13,403	36,603	13,845	9,836	3,702	9,221
1967.....	57,219	55,773	42,219	13,553	36,660	13,924	10,001	3,870	8,856
1968.....	57,155	58,358	43,722	14,636	37,903	13,280	11,020	4,237	9,357
1969 (prel.)	61,032	62,813	47,043	15,770	41,057	15,747	11,881	4,241	9,188

<sup>1</sup> Beginning 1955, includes Alaska, and 1962, Hawaii.

<sup>2</sup> Includes slabs, chips, and mill waste. Production is equal to receipts from domestic sources by woodpulp mills located in the United States.

<sup>3</sup> Includes Alaska and, beginning 1962, Hawaii.

<sup>4</sup> Source: American Pulpwood Association, New York, N.Y.; *Monthly Pulpwood Statistics*.

<sup>5</sup> Source: United States Pulp Producers Association, New York, N.Y.; *Monthly Statistical Summary*.

Source: Dept. of Commerce, Bureau of the Census; report of Census of Manufactures and *Current Industrial Reports*, Series M26A. Includes data from sources cited in footnotes.

## No. 1001. PAPER AND BOARD—PRODUCTION, BY TYPES: 1950 TO 1969

[In thousands of short tons. Excludes Hawaii and, for 1950, Alaska]

TYPE	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)
Total	24,375	30,178	34,444	44,091	47,113	46,892	50,753	53,480
Paper	10,630	12,905	15,300	19,187	20,653	20,703	22,110	23,460
Paperboard	10,926	13,867	15,676	20,835	22,574	22,346	24,208	25,553
Wet machine board	165	179	175	144	148	146	155	134
Construction paper and board	2,610	3,228	3,194	3,925	3,739	3,697	4,190	4,333

Source: Dept. of Commerce, Bureau of the Census; *Current Industrial Reports*, Series M26A.

## No. 1002. PAPER AND BOARD—PRODUCTION, BY GRADES: 1967 TO 1969

[In thousands of short tons. Excludes Hawaii. "N.e.c." means not elsewhere classified]

GRADE	1967	1968	1969 (prel.)	GRADE	1967	1968	1969 (prel.)
All grades	46,893	50,753	53,480	Paperboard	22,346	24,298	25,553
Paper	20,703	22,110	23,460	Solid woodpulp furnish	15,054	16,877	18,346
Printing, writing, and related	12,367	13,410	14,117	Packaging and industrial			
Newsprint	2,475	2,815	3,163	converting	12,210	13,542	15,141
Groundwood, uncoated	1,122	1,200	1,153	Unbleached kraft	9,075	10,063	11,768
Coated printing and converted	3,086	3,132	3,330	Bleached	3,135	3,479	3,383
Book, uncoated	2,260	2,537	2,585	Semichemical	2,843	3,335	3,205
Bleached bristols <sup>1</sup>	978	1,042	973	Combination furnish	7,292	7,422	7,207
Writing and related, n.e.c.	2,447	2,683	2,912	Combination paperboard	5,721	5,708	5,476
Packaging and industrial				Shipping container board	1,760	1,730	1,623
converting	5,112	5,270	5,723	Bending	2,017	2,874	2,681
Unbleached kraft	3,581	3,627	3,867	Nonbending	1,044	1,104	988
Other, except unbleached				Special combination packaging <sup>2</sup>	1,571	1,714	1,732
kraft	1,158	1,218	1,270				
Special industrial	374	481	585	Wet machine board	146	155	134
Tissue	3,224	3,425	3,620	Shoe	62	68	(NA)
Sanitary	2,972	3,165	3,378	Binder's	(D)	(D)	(NA)
Other, excluding sanitary				Other	(D)	(D)	(NA)
and thin	252	260	242	Construction paper and board	3,697	4,190	4,333
				Construction paper	1,583	1,592	1,708
				Structural insulating board	1,201	1,309	1,259
				Hard pressed board	963	1,288	1,372

<sup>1</sup> Withheld to avoid disclosure of data for individual companies. NA Not available.<sup>1</sup> Excludes cotton fibre index and bogus. <sup>2</sup> Includes industrial converting.Source: Dept. of Commerce, Bureau of the Census; *Current Industrial Reports*, Series M26A.

## No. 1003. NEWSPRINT—PRODUCTION, STOCKS, CONSUMPTION, IMPORTS, AND PRICE: 1950 TO 1969

[In thousands of short tons, except price]

COUNTRY AND ITEM	1950	1955	1960	1965	1966	1967	1968	1969
Canada, including Newfoundland:								
Production	5,270	6,191	6,739	7,720	8,410	8,051	8,031	8,758
Shipments from mills	5,311	6,236	6,782	7,747	8,385	7,968	8,096	8,741
Stocks at mills, end of year	89	80	140	150	184	268	203	220
United States: <sup>1</sup>								
Consumption by publishers <sup>2</sup>	4,642	5,045	5,532	6,387	6,868	6,907	7,025	7,344
Production <sup>3</sup>	1,015	1,552	2,038	2,180	2,408	2,620	2,935	3,232
Shipments from mills <sup>4</sup>	1,017	1,550	2,031	2,183	2,405	2,602	2,940	3,233
Stocks, end of year:								
At mills	8	8	26	19	21	30	27	27
At port and in transit to publishers	425	458	628	573	681	630	633	699
Imports <sup>4</sup>	4,864	5,164	5,412	6,328	6,991	6,599	6,463	6,790
Wholesale price, average <sup>4</sup> , dol. per ton	101.63	125.94	134.40	132.40	130.23	139.95	141.40	140.10

<sup>1</sup> Excludes Alaska and Hawaii, except as noted.<sup>2</sup> As reported by publishers accounting for about 75 percent of total newsprint consumption in 1969.<sup>3</sup> Beginning 1965, includes Alaska and Hawaii.<sup>4</sup> Based on reports of the Bureau of the Census. Includes Alaska, Hawaii, and Puerto Rico.<sup>4</sup> Source: Dept. of Labor, Bureau of Labor Statistics. Standard newsprint, rolls, contract, delivered to principal ports. Annual averages.

Source: Dept. of Commerce, Office of Business Economics (except as noted); based on data from the American Newspaper Publishers Association, New York, N.Y., and Newsprint Division, American Paper Institute, New York, N.Y. In Survey of Current Business.

## Section 25

### Fisheries

This section presents statistics relating to quantity, value, species, and disposition of fish caught for commercial purposes, and to fishery products. The principal sources of such data are the annual report, *Fishery Statistics of the United States*, and the monthly and annual bulletins in the *Current Fishery Statistics* series published by the Fish and Wildlife Service of the Department of the Interior.

The Fish and Wildlife Service conducts annual surveys of the fishery industries. Results from the surveys include data on the quantity and value of the catch of individual species of fish, employment in fisheries, gear operated, fishing and transporting craft used, employment in wholesale and manufacturing establishments, and the volume and value of production of manufactured fishery products. In addition, the reports include data on imports, exports, freezings, and cold storage holdings of fishery products; and monthly landings in most coastal States, and in Ohio, Michigan, and Wisconsin. Information is also collected covering shad fisheries of the Hudson and Potomac Rivers; alewife fisheries of the Potomac; seed oyster fisheries; Pacific Coast halibut fisheries; New England offshore fisheries; South Atlantic and Gulf shrimp fisheries; the fur seal industry of the Pribilof Islands; and the Pacific Coast whaling industry.

The first comprehensive survey of fisheries and fishery industries of the United States was made for the year 1880, although it did not include the Mississippi River and its tributaries. A complete survey of the United States was conducted in 1908 by the Bureau of the Census and again in 1931 by the Bureau of Fisheries. Various sections of the country have been surveyed from time to time. A complete survey of all sections, including manufacturing and wholesaling operations, was made for 1950. Beginning in 1954, complete data have been collected annually, except for a portion of the Mississippi River and its tributaries in 1961.

Reports of the 1963 and 1967 Censuses of Commercial Fisheries, conducted by the Bureau of the Census, present statistics on the number of commercial fishing operators, receipts from fishing activities, employment, vessels operated, value of catch, and fishing gear.

**Historical statistics.**—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1957*. See preface.

#### No. 1004. FISHERIES—QUANTITY AND VALUE OF CATCH: 1930 TO 1969

[Prior to 1950, excludes Hawaii. See also *Historical Statistics, Colonial Times to 1957*, series L 110-111]

YEAR	QUANTITY (mill. lb.)			Value (mill. dol.)	Aver- age price per lb. (cents)	YEAR	QUANTITY (mill. lb.)			Value (mill. dol.)	Aver- age price per lb. (cents)
	Total	For human food	For indus- trial prod- ucts <sup>1</sup>				Total	For human food	For indus- trial prod- ucts <sup>1</sup>		
1930	3,224	2,478	746	109	3.4	1963	4,847	2,556	2,291	377	7.8
1940	4,059	2,674	1,385	99	2.4	1964	4,541	2,497	2,044	389	8.6
1945	4,598	3,167	1,431	270	5.9	1965	4,777	2,587	2,190	445	9.3
1950	4,901	3,307	1,594	347	7.1	1966	4,366	2,572	1,794	472	10.8
1955	4,809	2,579	2,230	339	7.1	1967	4,055	2,388	1,687	440	10.8
1960	4,942	2,498	2,444	354	7.2	1968	4,116	2,296	1,820	472	11.5
1962	5,364	2,540	2,814	390	7.4	1969 (prel.)	4,292	2,246	2,046	518	12.1

<sup>1</sup> Manufactured into meal, oil, fish solubles, homogenized condensed fish, shell products, and used as bait and animal food.

**No. 1005. FISHERIES—EMPLOYMENT, FISHING CRAFT, AND ESTABLISHMENTS: 1950 TO 1968**

[1950 excludes Hawaii]

ITEM	1950	1955	1960	1965	1966	1967	1968
<b>Persons employed</b>							
Fishermen	263,478	242,184	224,056	215,429	224,384	225,124	(NA)
Shore workers	161,463	144,359	130,431	128,585	135,636	136,500	(NA)
	102,015	97,825	93,625	86,864	88,748	88,624	88,742
<b>Craft utilized</b>							
Vessels, 5 net tons and over	92,310	81,340	77,057	79,532	82,122	84,200	(NA)
Motorboats	11,496	11,796	12,018	12,311	12,677	13,100	(NA)
Other boats	46,007	58,218	56,899	63,828	66,941	68,600	(NA)
	34,747	11,326	8,150	3,303	2,504	2,500	(NA)
<b>Fishery shore establishments</b>	3,883	4,124	4,207	4,185	4,187	4,053	3,967

NA. Not available.

<sup>1</sup> Exclusive of duplication.

Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fishery Statistics of the United States*.

**No. 1006. FISHERIES—FISHERMEN, FISHING CRAFT, AND CATCH, BY AREAS: 1968**

[See *Historical Statistics, Colonial Times to 1957*, series L 110-123, for data on quantity of catch]

AREA	Fisher-men	Fishing vessels	Fishing boats <sup>1</sup>	CATCH (mil. lb.)			VALUE OF CATCH (mil. dol.)		
				Total	Fish	Shell-fish	Total	Fish	Shell-fish
<b>United States</b>	(NA)	(NA)	(NA)	4,173	3,402	771	2,506	292	2,214
New England States	18,187	699	9,732	635	562	73	76	35	41
Middle Atlantic States	8,740	647	4,930	186	132	54	25	6	19
Chesapeake Bay States	16,464	1,434	9,616	438	343	95	37	9	28
South Atlantic States	(NA)	(NA)	(NA)	329	204	65	31	10	21
Gulf States	(NA)	(NA)	(NA)	1,317	1,066	251	161	89	62
Pacific Coast States	(NA)	(NA)	(NA)	1,116	897	210	2,170	129	2,41
Great Lakes States	1,841	298	811	69	69	-	6	6	-
Mississippi River States	(NA)	(NA)	(NA)	70	56	14	7	5	2
Hawaii	1,032	63	480	13	13	(Z)	3	3	(Z)

- Represents zero. NA. Not available. Z. Less than 500,000 pounds or \$500,000.

<sup>1</sup> Refers to craft having capacity of less than 5 net tons. <sup>2</sup> Includes whale products.

Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fishery Statistics of the United States*.

**No. 1007. COMMERCIAL FISHING VESSEL OPERATORS: 1963 AND 1967**

ITEM	Total	1963		1967, total	
		Operators with primary catch of			
		Finfish	Other marine products <sup>1</sup>		
Operators, number	9,251	5,377	3,874	10,267	
Gross receipts	\$1,000	277,114	170,937	324,584	
Employees, annual average	18,777	11,272	7,505	17,756	
Payroll	\$1,000	99,856	65,321	84,535	
Vessels, number	10,666	5,898	4,768	10,417	
				12,218	

<sup>1</sup> Includes catches of shellfish and miscellaneous marine products such as sponges, frogs, and turtles.

Source: Dept. of Commerce, Bureau of the Census; *Census of Commercial Fisheries, 1963 and 1967*.

## Commercial Fisheries—Quantity and Value of Catch 635

## No. 1008. COMMERCIAL FISHING VESSEL OPERATORS—STATES: 1963 AND 1967

STATE	1963		1967		STATE	1963		1967	
	Number	Gross receipts (\$1,000)	Number	Gross receipts (\$1,000)		Number	Gross receipts (\$1,000)	Number	Gross receipts (\$1,000)
Total	9,251	277,114	10,267	324,584	S.A.—Con.				
N.E.	729	45,086	657	44,682	D.C.	-	-	3	25
Maine	148	4,984	110	6,315	Va.	572	9,005	727	13,729
Mass.	450	35,325	429	34,447	N.C.	273	4,553	316	6,040
R.I.	79	2,819	77	2,528	S.O.	127	1,308	115	3,671
Conn.	62	1,958	41	1,392	Ga.	193	3,203	166	4,229
					Fla.	740	27,471	987	36,270
M.A.	394	12,004	349	14,814	E.S.C.	272	12,351	416	12,454
N.Y.	141	4,661	150	6,029	Ala.	125	3,281	224	6,333
N.J.	244	7,235	158	7,316	Miss.	147	9,080	191	6,121
Pa.	9	108	41	1,489					
E.N.C.	337	4,685	256	4,995	W.S.C.	1,373	47,121	1,592	61,712
Ohio	52	1,259	1,374		La.	760	21,518	869	26,827
Ill.	6	294	4	53	Tex.	613	25,603	733	36,885
Mich.	170	1,961	140	2,154	Mt.	5	131	-	-
Wis.	109	1,171	83	1,414	Pac.	3,797	104,996	4,185	115,693
W.N.C. <sup>1</sup>	26	210	11	83	Wash.	1,320	30,393	1,322	35,574
Minn.	19	151	11	83	Oreg.	320	4,651	448	8,325
S.A.	2,318	50,530	2,802	70,151	Calif.	980	44,196	1,175	44,834
Del.	34	1,183	10	878	Alaska	1,100	23,451	1,183	24,264
Md.	379	2,817	498	4,709	Hawaii	77	2,305	57	2,666

<sup>-</sup> Represents zero. <sup>1</sup> For 1963, West North Central includes Iowa, Mo., N. Dak., and S. Dak.; for 1967, Minnesota only. Mountain includes Idaho and Utah. Data not shown separately to avoid disclosure of individual operations.

Source: Dept. of Commerce, Bureau of the Census; *Census of Commercial Fisheries, 1963 and 1967*.

## No. 1009. FISHERIES—CATCH AND VALUE OF PRINCIPAL SPECIES: 1950 TO 1969

[Catch in millions of pounds value in millions of dollars. 1960 excludes Hawaii]

SPECIES	1950		1960		1965		1968		1969 (prel.)	
	Catch	Value	Catch	Value	Catch	Value	Catch	Value	Catch	Value
<b>FISH</b>										
Cod, Atlantic	57	4	40	3	36	3	49	4	58	5
Flounder	132	12	127	13	180	18	113	14	118	16
Haddock	139	12	119	9	134	14	71	9	46	8
Halibut, Pacific	51	8	51	6	40	9	26	4	33	8
Herring, sea	384	3	239	4	110	2	108	3	83	2
Mackerel, Pacific and jack	166	3	118	2	74	2	59	2	54	2
Menhaden	1,026	10	2,018	20	1,726	27	1,881	19	1,548	23
Ocean perch, Atlantic	208	9	141	5	84	3	62	2	56	2
Salmon, Pacific	329	37	236	45	327	65	328	66	246	55
Sardine, Pacific	715	12	58	1	1	(z)	(z)	(z)	(z)	(z)
Tuna <sup>z</sup>	391	61	298	83	319	42	294	47	323	54
Whiting	67	1	112	3	83	2	78	3	46	3
<b>SHELLFISH</b>										
Clams	41	11	50	12	71	17	66	20	76	24
Crabs	159	9	222	17	335	31	238	44	235	39
Lobsters, northern	23	8	31	14	30	22	32	25	32	27
Oysters (meats)	76	30	60	29	55	28	56	30	52	28
Shrimp (heads-on)	191	43	249	67	244	82	292	113	317	123

<sup>z</sup> Less than 500,000 pounds or \$500,000.

<sup>1</sup> Excludes landings of tuna by U.S. vessels in Puerto Rico.

Source: Dept. of the Interior, Fish and Wildlife Service; annual reports, *Fishery Statistics of the United States* and *Fisheries of the United States*.

**No. 1010. FISHERIES—QUANTITY AND VALUE OF CATCH, BY STATES, AND CATCH OF PRINCIPAL SPECIES, BY AREAS: 1940 TO 1968**

[Catch in thousands of pounds; value in thousands of dollars. Values represent the value of fish to fishermen.  
See also *Historical Statistics, Colonial Times to 1957*, series L 114-154.]

STATE, CATCH, AND VALUE	1940	1950	1955	1960	1965	1966	1967	1968
<b>New England:</b>								
Catch	926,054	1,006,690	955,418	851,964	702,181	684,375	625,340	634,900
Value	20,494	60,576	57,243	61,474	74,837	78,247	70,256	75,700
Maine: Catch	88,088	356,266	257,174	294,641	204,846	200,392	197,488	218,700
Value	2,607	14,680	18,083	20,071	21,922	24,329	22,973	25,600
New Hampshire: Catch	788	645	948	1,188	1,272	1,266	1,166	1,200
Value	105	219	345	430	637	686	633	700
Massachusetts: Catch	510,938	591,188	568,413	480,421	442,430	409,744	345,021	338,400
Value	15,756	40,768	35,057	35,947	46,147	46,175	39,068	41,000
Rhode Island: Catch	12,060	38,265	115,323	60,318	48,706	68,088	76,347	71,100
Value	986	2,788	4,738	3,846	4,624	5,323	5,704	6,300
Connecticut: Catch	14,180	20,226	15,560	6,396	4,027	4,835	4,768	5,500
Value	1,060	2,114	1,020	1,180	1,507	1,754	1,788	1,500
<b>Catch, by species:</b>								
Cod	82,289	53,068	32,369	35,255	35,465	37,290	43,870	48,600
Flounder	57,572	66,824	50,064	61,559	112,061	104,050	98,301	94,900
Haddock	141,193	157,765	135,020	118,615	133,878	132,264	98,438	70,000
Herring, sea	44,053	195,154	104,286	154,607	75,014	65,503	68,557	94,800
Lobster	11,165	22,550	27,024	29,200	28,530	26,037	24,766	30,000
Ocean perch	85,142	207,793	158,980	141,433	83,607	81,552	71,409	61,500
Whiting	40,869	65,461	110,630	103,637	75,277	83,841	59,909	71,700
<b>Middle Atlantic:</b>								
Catch	1,355,553	491,885	871,098	783,848	355,951	187,912	162,600	188,500
Value	17,651	28,848	28,987	21,757	24,681	21,576	23,686	28,200
New York: Catch	91,950	142,341	132,791	125,032	147,482	64,113	38,047	59,400
Value	4,216	15,602	9,498	8,781	12,387	11,340	12,711	14,300
New Jersey: Catch	160,554	188,628	421,286	373,688	160,440	98,273	123,688	126,400
Value	2,957	10,200	13,074	9,607	11,385	9,886	10,716	10,000
Delaware: Catch	103,017	160,721	317,019	284,228	48,049	5,526	885	700
Value	476	8,141	6,365	3,369	909	341	259	300
<b>Catch, by species:</b>								
Clams	7,658	21,681	10,671	31,776	52,240	54,895	54,521	45,300
Menhaden	245,369	372,946	768,827	670,799	151,011	22,016	46,538	86,300
Oysters	13,983	18,170	9,848	1,154	757	917	1,190	1,538
Scup	6,776	20,566	20,686	26,638	16,635	8,415	7,307	1,402
<b>Chesapeake Bay:</b>								
Catch	320,730	380,892	406,208	435,797	591,534	501,689	422,317	437,868
Value	7,486	25,007	31,601	34,861	40,180	35,238	35,449	36,559
Maryland: Catch	51,085	67,002	55,249	60,113	86,672	83,309	74,666	55,788
Value	2,599	8,888	11,147	13,936	13,220	14,270	17,356	16,000
Virginia: Catch	260,651	313,800	440,059	366,684	504,862	418,380	347,651	382,070
Value	4,858	16,110	20,454	20,925	20,969	20,959	18,098	20,550
<b>Catch, by species:</b>								
Alewives	18,112	34,628	26,988	18,989	38,202	29,968	30,444	36,282
Clams	1,843	1,701	3,950	7,828	10,878	9,501	8,548	13,322
Crabs	41,816	80,046	45,128	70,718	58,334	97,016	82,815	56,904
Menhaden	143,227	170,012	315,359	248,905	359,946	277,895	223,268	274,077
Oysters	37,457	29,054	30,227	27,111	21,188	21,232	25,798	22,079
<b>South Atlantic:</b>								
Catch	325,515	260,881	346,574	378,879	356,652	367,777	353,344	339,180
Value	4,064	18,944	17,274	20,230	26,789	27,069	25,026	33,513
North Carolina: Catch	170,581	172,338	233,096	205,248	233,061	250,032	225,088	232,200
Value	1,855	6,800	7,284	7,020	9,241	9,671	8,328	10,200
South Carolina: Catch	9,446	14,726	22,033	24,252	26,611	23,192	18,868	21,300
Value	266	2,810	2,487	4,039	4,928	4,100	3,220	5,600
Georgia: Catch	12,672	17,351	19,025	27,968	20,059	16,024	16,382	14,400
Value	381	3,584	2,472	3,391	4,140	3,883	3,655	6,300
Florida (east coast):								
Catch	132,816	50,466	72,420	61,411	76,021	77,629	93,006	71,280
Value	1,553	5,750	5,031	5,780	8,480	9,416	9,823	11,413
<b>Catch, by species:</b>								
Crabs	15,201	20,275	32,606	44,027	40,432	40,830	37,546	33,518
Menhaden	224,882	147,125	227,811	215,023	192,275	215,114	193,778	191,382
Shrimp	22,702	36,481	28,639	31,214	26,191	21,475	20,598	24,277

<sup>1</sup> Includes Pennsylvania not shown separately.

No. 1010. FISHERIES—QUANTITY AND VALUE OF CATCH, BY STATES, AND CATCH OF PRINCIPAL SPECIES, BY AREAS: 1940 TO 1968—Continued

[Catch in thousands of pounds; value in thousands of dollars. Values represent the value of fish to fishermen. See also *Historical Statistics, Colonial Times to 1957*, Series L 114-154]

STATE, CATCH, AND VALUE	1940	1950	1955	1960	1965	1966	1967	1968
<b>Gulf States:</b>								
Catch-----	250,018	570,641	829,638	1,265,950	1,463,475	1,196,188	1,180,781	1,280,920
Value-----	10,582	50,358	76,287	85,459	113,542	122,581	127,406	124,787
Florida: <sup>2</sup> Catch-----	54,678	62,013	105,756	135,635	135,866	125,975	114,408	109,720
Value-----	3,452	9,955	21,190	21,048	26,866	24,984	23,118	21,487
Alabama: Catch-----	11,344	10,988	13,441	12,106	17,789	20,502	20,412	32,300
Value-----	562	2,122	2,265	3,003	4,986	6,807	8,300	9,800
Mississippi: Catch-----	64,672	93,023	188,387	314,214	368,385	269,563	262,059	242,400
Value-----	1,384	5,441	6,726	7,006	9,264	8,066	8,986	8,700
Louisiana: Catch-----	109,957	307,366	391,953	566,411	787,097	656,834	639,675	747,500
Value-----	4,191	21,575	22,378	25,949	30,852	38,970	37,280	40,600
Texas: Catch-----	19,369	97,251	130,101	237,084	154,348	122,944	138,227	149,000
Value-----	998	11,265	28,720	27,868	35,574	42,745	49,722	44,200
<b>Catch, by species:</b>								
Crabs-----	18,636	19,218	20,337	35,768	37,879	31,964	28,529	27,328
Menhaden-----	25,195	326,030	480,992	840,907	1,022,837	762,871	700,088	823,357
Mullet-----	30,417	23,892	27,508	32,708	33,918	30,014	29,280	25,295
Oysters-----	17,584	12,292	13,881	16,098	19,156	17,182	21,747	26,788
Shrimp-----	127,838	151,753	212,402	206,725	195,237	179,230	226,731	231,878
<b>Great Lakes:</b> <sup>3</sup>								
Catch-----	79,298	70,882	76,754	68,243	55,905	69,450	83,565	68,983
Value-----	5,623	10,846	9,699	7,133	5,832	5,874	6,050	5,863
Superior: Catch-----	20,872	12,584	13,581	13,771	8,748	8,258	7,995	6,573
Value-----	904	1,977	1,886	1,301	1,068	1,095	1,183	1,004
Michigan: Catch-----	22,601	27,078	30,036	24,311	26,694	42,784	58,951	45,810
Value-----	2,050	3,661	3,221	2,447	2,426	2,816	2,983	3,087
Huron: Catch-----	9,012	5,073	4,553	6,338	4,678	3,769	3,211	2,678
Value-----	680	411	484	1,249	776	549	476	439
Erie: Catch-----	22,944	23,982	26,796	21,258	13,524	12,898	11,615	11,921
Value-----	1,772	4,672	3,554	1,920	1,414	1,178	1,326	1,166
<b>Pacific Coast:</b>								
Catch-----	2,010,960	1,997,542	1,115,427	1,060,826	1,146,726	1,253,637	1,184,735	1,099,837
Value-----	40,190	139,199	106,532	112,118	148,363	168,126	140,377	162,108
Washington: Catch-----	111,633	118,694	165,305	113,115	127,357	138,218	174,770	125,037
Value-----	6,676	19,071	20,906	15,551	18,477	20,059	24,019	20,516
Oregon: Catch-----	54,203	58,256	46,710	49,160	69,145	74,804	91,932	94,500
Value-----	2,742	7,151	5,088	6,055	8,816	11,167	16,284	16,692
California: Catch-----	1,290,446	1,338,299	598,089	540,837	458,028	460,945	506,988	446,100
Value-----	20,160	81,005	53,175	49,578	50,743	55,582	51,384	53,300
Alaska: Catch-----	563,688	482,293	315,323	367,713	492,195	581,670	361,345	433,700
Value-----	10,612	31,372	28,768	40,934	70,327	80,718	47,790	71,000
<b>Catch, by species:</b>								
Crabs-----	16,132	28,810	20,004	64,847	160,913	109,251	170,595	135,600
Flounder-----	20,415	49,799	46,912	47,683	46,463	46,830	46,159	44,800
Halibut-----	28,733	12,455	22,410	50,982	40,497	40,326	39,778	25,700
Herring-----	1,060	1,864	2,413	83,820	34,543	24,107	18,299	12,700
Mackerel-----	120,504	32,650	23,310	36,810	27,050	4,630	1,187	1,500
Pilchard or sardine-----	913,943	619,498	145,608	57,633	1,924	1,873	149	100
Salmon-----	500,561	328,644	289,880	266,447	320,806	357,612	216,664	327,700
Shrimp-----	1,302	3,954	4,825	12,418	20,091	34,438	34,462	52,200
Tuna-----	204,882	389,891	269,362	287,765	206,485	256,851	314,750	281,200
<b>Mississippi River and tributaries: Catch-----</b>								
(NA)	105,796	103,166	85,805	84,755	111,872	80,571	70,500	
(NA)	10,104	8,205	7,829	7,844	10,514	8,380	7,000	
<b>Hawaii: Catch-----</b>	(NA)	15,917	15,098	11,118	19,583	13,014	11,842	12,896
Value-----	(NA)	3,508	3,113	2,704	3,602	3,128	3,077	3,451
Tuna catch-----	(NA)	11,918	11,958	9,020	17,450	10,697	9,268	10,342

NA Not available.

<sup>2</sup> West coast. <sup>3</sup> Collected largely by State fishery agencies, and compiled by Fish and Wildlife Service.

<sup>4</sup> Includes, in addition to lakes shown, small amounts for Lake Ontario, Lake St. Clair, Lake of the Woods, Namakan Lake, and Rainy Lake.

Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fishery Statistics of the United States*.

## Fisheries

## No. 1011. SUPPLY OF FISHERY PRODUCTS: 1955 TO 1969

[Round weight, in millions of pounds, except as indicated]

ITEM	1955	1960	1965	1966	1967	1968	1969 (prel.)
Total	7,121	8,223	10,534	12,467	13,991	17,337	11,802
For human food	3,911	4,264	5,162	5,431	4,849	5,528	5,599
For industrial use	3,210	3,959	5,872	7,036	9,142	11,809	6,203
Domestic catch	4,809	4,942	4,776	4,364	4,055	4,116	4,292
Percent of total	87.5	60.1	45.3	35.0	29.0	23.7	36.4
For human food	2,679	2,498	2,586	2,572	2,368	2,298	2,246
For industrial use	2,230	2,444	2,190	1,792	1,687	1,820	2,040
Imports <sup>2</sup>	2,312	3,281	5,758	8,103	9,936	13,221	7,510
Percent of total <sup>2</sup>	82.5	39.9	54.7	65.0	71.0	76.3	63.6
For human food <sup>2</sup>	1,332	1,766	2,576	2,859	2,481	3,282	3,353
For industrial use <sup>2</sup>	980	1,515	3,182	5,244	7,455	9,989	4,157

<sup>1</sup> Univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.) are reported in the weights of meats, excluding the shell.

<sup>2</sup> Excludes imports of cured cod into Puerto Rico; includes landings of foreign caught tuna in American Samoa.

Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fisheries of the United States*.

## No. 1012. FISHERIES—DISPOSITION OF DOMESTIC CATCH: 1950 TO 1969

[Round weight of catch in millions of pounds. Prior to 1960, excludes Hawaii. In addition to whole fish, a large portion of waste derived from canning, filleting, and dressing fish and shellfish is utilized in production of fish meal and oil. From 400 to 500 million pounds of waste were used in meal and oil production in each year shown. See also *Historical Statistics, Colonial Times to 1957*, series L 155-161.]

DISPOSITION	1950	1955	1960	1964	1965	1966	1967	1968	1969 (prel.)
Total	4,884	4,794	4,942	4,541	4,777	4,366	4,055	4,116	4,292
Fresh and frozen	1,692	1,668	1,631	1,643	1,751	1,724	1,575	1,503	1,500
Canned	1,720	1,039	1,043	1,033	1,042	1,006	1,001	997	935
Cured	100	86	82	71	76	77	77	76	70
Reduced to meal, oil, etc.	1,372	2,101	2,186	1,794	1,908	1,557	1,402	1,540	1,778

Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fisheries of the United States*.

## No. 1013. PER CAPITA CONSUMPTION OF COMMERCIALLY CAUGHT FISH AND SHELLFISH: 1940 TO 1969

Pounds of edible meat]

ITEM	1940	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)
Total	11.0	11.8	10.5	10.3	10.9	10.8	10.8	11.0	11.1
Fresh and frozen	5.7	6.3	5.9	5.7	6.0	6.0	6.0	6.2	6.4
Canned	4.6	4.9	3.9	4.0	4.4	4.3	4.3	4.3	4.2
Salmon	2.0	1.4	1.0	0.7	0.9	0.8	0.6	0.7	0.7
Sardines (pilchard and herring)	1.0	1.4	0.6	0.4	0.3	0.4	0.4	0.4	0.4
Tuna	0.6	1.1	1.4	2.0	2.3	2.3	2.4	2.4	2.4
Shellfish	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.3
Other	0.1	0.2	0.3	0.5	0.2	0.2	0.3	0.2	0.2
Cured	0.7	0.6	0.7	0.6	0.5	0.5	0.5	0.5	0.5

Source: Dept of the Interior, Fish and Wildlife Service; annual report, *Fisheries of the United States*.

**No. 1014. CANNED FISHERY PRODUCTS—PRODUCTION AND VALUE, BY SPECIES: 1960 TO 1969**

[See also *Historical Statistics, Colonial Times to 1957*, series L 176-195]

PRODUCT	PRODUCTION (1,000 lb.)				VALUE (\$1,000)			
	1960	1965	1968	1969 (prel.)	1960	1965	1968	1969 (prel.)
Total.....	1,083,556	1,121,629	1,267,025	1,160,761	387,595	495,231	583,908	580,812
Salmon.....	136,040	174,413	166,400	120,948	88,197	122,744	118,015	97,226
Sardines <sup>1</sup> .....	74,458	30,020	40,489	24,402	21,859	10,989	10,297	11,581
Tuna.....	301,388	358,405	395,957	396,048	172,879	232,976	268,731	207,456
Mackerel.....	42,084	81,655	22,294	17,354	5,804	4,907	4,098	3,316
Shrimp.....	14,288	15,620	18,967	19,142	17,233	20,655	20,444	27,946
Clam products.....	45,256	67,592	61,830	63,153	13,076	18,097	20,444	21,048
Oysters.....	5,747	4,038	4,557	2,000	5,840	3,701	5,624	2,164
Other.....	464,326	439,882	567,441	517,714	63,007	81,122	118,255	119,525

<sup>1</sup> Through 1965, Maine (also known as Atlantic sea herring) and California sardines; thereafter, "California sardines" included in "Other."

Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fishery Statistics of the United States*.

**No. 1015. INDUSTRIAL FISHERY PRODUCTS—PRODUCTION AND VALUE: 1950 TO 1969**  
[Excludes Hawaii except, beginning 1955, meal includes Hawaii, Puerto Rico, and American Samoa. See also *Historical Statistics, Colonial Times to 1957*, series L 177 and L 196-201]

PRODUCT	1950	1955	1960	1965	1966	1967	1968	1969 (prel.)
Scrap and meal:								
Production.....								
Production.....	239,713	204,502	290,187	254,051	224,153	211,180	235,136	252,584
Value.....	\$1,000..	29,226	34,749	26,282	35,707	32,316	26,088	30,261
Oil, except vitamin:								
Production.....	1,000 gal.	21,432	24,679	27,853	1 25,218	21,267	15,793	22,461
Value.....	\$1,000..	14,042	14,280	13,087	{ 350	14,852	12,521	6,112
Vitamin oil, value.....	\$1,000..	3,431	589	350			7,327	9,325

<sup>1</sup> Includes a small amount of vitamin oil.

Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fishery Statistics of the United States*.

**No. 1016. FRESH AND FROZEN FISH AND FROZEN FISHERY PRODUCTS: 1960 TO 1969**  
[Excludes Alaska and Hawaii, except frozen fishery products includes Alaska. See *Historical Statistics, Colonial Times to 1957*, series L 160, for frozen fishery products]

PRODUCT	PRODUCTION (1,000 lb.)				VALUE (\$1,000)			
	1960	1965	1968	1969 (prel.)	1960	1965	1968	1969 (prel.)
Fresh and frozen packaged fish.....	153,166	168,832	135,512	136,752	48,437	66,314	60,368	69,584
Cod.....	9,483	9,975	13,055	15,407	2,851	3,530	5,338	8,140
Flounder.....	28,378	49,680	43,384	46,184	11,204	20,287	20,478	24,938
Haddock.....	33,324	40,154	22,351	13,353	10,839	16,286	11,162	8,492
Ocean perch, Atlantic.....	43,651	22,606	16,550	14,618	10,177	6,166	3,953	4,037
Whiting.....	2,951	2,286	2,090	895	571	509	520	270
Other.....	36,479	44,185	38,177	46,298	12,795	19,566	18,917	23,707
<i>Frozen fishery products</i> .....	328,741	366,781	368,427	352,695	(NA)	(NA)	(NA)	(NA)

NA Not available.

Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fishery Statistics of the United States*.

## No. 1017. PROCESSED FISHERY PRODUCTS—SUMMARY: 1960, 1968, AND 1969

[Production in thousands of pounds, except as indicated. Includes Puerto Rico and American Samoa]

PRODUCT	1960		1968		1969 (prel.)	
	Production	Value (\$1,000)	Production	Value (\$1,000)	Production	Value (\$1,000)
	(X)	812,847	(X)	1,889,879	(X)	(NA)
Total	584,220	315,812	1,022,566	672,637	(NA)	(NA)
Packaged products, fresh and frozen						
Fish:						
Not breaded:						
Fillets and steaks, raw	158,166	48,437	136,009	60,705	136,752	60,584
Dressed	(NA)	(NA)	46,214	5,016	(NA)	(NA)
Other <sup>1</sup>	6,166	1,282	8,265	2,506	(NA)	(NA)
Breaded, raw and cooked:						
Sticks	65,142	28,671	91,695	41,454	113,338	51,225
Fillets, portions, and steaks	51,924	18,965	194,966	76,982	211,616	81,447
Shellfish:						
Not breaded	191,749	188,022	272,881	309,238	(NA)	(NA)
Breaded, raw and cooked	84,221	57,412	123,685	113,272	(NA)	(NA)
Specialties, fish and shellfish	31,852	23,043	140,851	63,485	(NA)	(NA)
Canned products	1,083,556	387,595	1,267,025	583,908	1,160,761	580,812
Fish and shellfish for human consumption	601,066	342,747	782,102	499,287	708,566	498,277
Salmon eggs for bait	718	869	679	2,117	620	1,868
Animal food	421,772	43,079	484,244	82,504	451,575	80,078
Cured fish	68,319	42,845	67,186	63,207	(NA)	(NA)
Salted (includes spiced and pickled) <sup>2</sup>	35,950	14,388	36,216	24,534	(NA)	(NA)
Smoked	31,512	27,557	29,883	35,630	(NA)	(NA)
Sun dried (includes freeze dried)	867	900	1,137	3,043	(NA)	(NA)
Industrial products						
Meat and scrap	(X)	66,595	(X)	70,127	(X)	84,599
Oil (body and liver)	1,000 tons	200	25,282	235	30,261	30,800
Oil (body and liver)	1,000 gallons	27,886	13,886	22,461	7,327	9,328
Fish solubles	1,000 tons	* 99	* 4,021	72	8,707	82
Oyster shell grit and lime	1,000 tons	471	6,821	240	3,572	207
Shell buttons	1,000 gross tons	1,940	3,263	463	1,078	411
Other		(X)	13,832	(X)	24,182	27,160

NA Not available. X Not applicable.

<sup>1</sup> Includes unbreaded portions and whale meat for animal feeding.<sup>2</sup> Includes lutefisk from dried cod.<sup>3</sup> Includes homogenized condensed fish. <sup>4</sup> Fresh water mussel and marine shell.Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fishery Statistics of the United States*.

## No. 1018. FISHERY PRODUCTS—IMPORTS AND EXPORTS: 1940 TO 1969

[Quantity in thousands of pounds; value in thousands of dollars. Includes Puerto Rico; beginning 1955, imports also include landings of tuna by foreign vessels in American Samoa. See *Historical Statistics, Colonial Times to 1957*, series L 162, for edible imports]

YEAR	IMPORTS				EXPORTS			
	Total value	Edible products		Non-edible, value	Total value	Edible products		Non-edible, value
		Quantity	Value			Quantity	Value	
1940	41,830	302,518	29,073	12,757	17,785	144,804	17,115	070
1945	101,254	404,788	76,434	24,820	38,510	135,979	30,555	7,618
1950	108,206	639,725	158,414	39,882	27,474	121,623	18,856	8,618
1955	258,869	780,188	208,973	49,896	39,977	109,750	24,923	18,554
1960	303,281	1,095,014	310,596	52,685	44,165	61,464	25,622	18,543
1965	600,904	1,398,778	470,412	121,402	60,483	98,444	49,308	20,175
1966	720,447	1,593,350	568,216	152,231	84,813	109,604	62,882	21,931
1967	707,883	1,470,437	538,301	160,582	82,209	107,940	67,524	14,685
1968	822,669	1,741,365	643,166	179,504	67,757	90,808	56,846	10,912
1969 (prel.)	844,293	1,700,571	704,809	139,484	104,533	140,646	86,474	18,059

Source: Dept. of the Interior, Fish and Wildlife Service; annual reports, *Fishery Statistics of the United States* and *Fisheries of the United States*. Compiled from data furnished by Dept. of Commerce, Bureau of the Census.

# Fishery Products—Pollution-Caused Fish Kill

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No. 1019. SELECTED FISHERY PRODUCTS—IMPORTS AND EXPORTS: 1960 TO 1969  
 [Quantity in thousands of pounds; value in thousands of dollars. Includes Puerto Rico. See *Historical Statistics, Colonial Times to 1957*, series L 164-171, for selected imports]

PRODUCT	1960		1965		1968		1969 (prel.)	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<b>IMPORTS</b>								
<b>Edible:</b>								
Fresh or frozen:								
Whitefish (exc. fillets)	14,483	5,520	13,382	5,278	10,335	4,704	8,983	4,701
Halibut (exc. fillets)	24,124	5,932	21,728	7,508	18,082	5,627	20,093	5,563
Salmon (exc. fillets)	13,472	6,340	7,861	5,194	9,811	7,082	8,425	6,892
Sea herring	74,682	1,728	117,993	2,222	200,988	3,085	119,550	1,853
Smelt	8,487	1,402	8,800	1,308	9,096	1,567	8,585	1,509
Swordfish (exc. fillets)	7,266	2,994	7,193	3,784	7,298	4,678	7,407	4,998
Tuna	234,648	29,595	230,221	48,501	392,182	72,802	305,477	73,407
Groundfish fillets	155,550	33,265	294,954	73,934	390,236	92,375	426,728	107,848
Other fillets and steaks	61,713	20,955	74,724	30,078	109,183	44,050	120,434	53,289
Lobster and spiny lobster	53,749	44,767	56,411	68,701	59,815	99,036	62,430	112,708
Shrimp and prawn	113,418	66,406	160,287	111,277	184,798	158,228	190,158	172,114
Canned:								
Anchovies, in oil	5,180	2,173	4,543	3,617	4,912	4,350	4,673	4,978
Salmon	19,113	7,541	101	50	4,955	2,820	2,217	1,376
Sardines, in oil	21,236	8,330	21,632	10,241	28,436	13,178	27,220	12,441
Sardines and herring, not in oil	16,732	3,467	31,435	6,383	41,264	9,209	29,128	7,976
Tuna	51,755	19,142	59,961	20,428	67,173	31,681	73,116	37,007
Bonito and yellowtail	8,904	2,208	3,032	1,043	893	321	718	302
Crab meat	4,507	5,514	4,168	4,935	4,720	5,373	3,436	6,196
Lobster, common and spiny	2,939	5,239	2,980	7,386	2,664	6,587	2,771	8,141
Pickled or salted:								
Cod, haddock, hake, pollock, and cusk	47,365	9,435	41,541	8,810	39,208	10,987	37,992	10,637
Herring	29,294	3,924	26,742	3,756	21,085	3,088	19,312	2,897
Nonedible (scrap and meal)	264,000	11,068	542,000	30,720	1,710,000	82,517	716,000	41,297
<b>EXPORTS</b>								
Canned:								
Salmon	11,924	9,830	24,802	16,910	5,726	4,604	15,636	11,585
Mackerel	1,305	211	2,174	401	305	66	174	35
Sardines	21,219	3,508	3,376	990	3,033	1,314	2,095	901
Fish oil, nonedible	143,659	10,688	103,807	9,208	65,129	2,700	196,073	11,048

Source: Dept. of the Interior, Fish and Wildlife Service; annual report, *Fishery Statistics of the United States*. Compiled from data furnished by Dept. of Commerce, Bureau of the Census.

## No. 1020. POLLUTION-CAUSED FISH KILL, BY SOURCE OF POLLUTION AND TYPE OF WATER: 1965 TO 1969

[Fish in thousands. Estimates based on reports from State agencies responsible for fisheries management]

ITEM	1965	1967	1968	1969	ITEM	1965	1967	1968	1969
Number of reports	446	303	379	383	Source of pollution—Continued				
Fish reported killed—number	11,393	11,119	14,826	40,637	Municipal operations	5,912	644	6,792	1,155
					Refuse disposal	17	—	4	42
Source of pollution:					Sewerage systems	5,211	627	6,182	413
Agricultural operations	1,390	1,607	376	6,294	Water systems	604	12	336	3
Insecticides, poisons, etc.	771	320	325	5,983	Other	76	6	1,270	1,607
Fertilizers	3	10	15	74	Transportation operations	307	148	826	2,057
Manure-sludge drainage	617	1,268	35	237	Pipeline	197	23	533	346
Industrial operations	3,764	8,087	6,256	28,680	Truck	106	27	6	66
Chemicals	210	44	732	922	Other	3	93	286	1,655
Food and kindred products	537	6,664	450	26,711	Other operations	21	638	578	2,451
Mining	295	1,113	83	534	Type of water:				
Paper and allied products	495	7	203	18	Fresh	11,256	11,086	9,870	34,958
Petroleum	1,518	53	4,273	106	Salt	102	30	2	641
Combinations	492	8	3	28	Estuary	36	3	4,954	5,040
Other	211	198	512	367	Average duration of kill—days	2.6	3.3	3.0	3.1

<sup>1</sup> Represents zero. <sup>2</sup> Includes 208,325 in 1968 and 696,596 in 1969 killed by power operations.

Source: Dept. of the Interior, Federal Water Pollution Control Administration; annual report, *Pollution-Caused Fish Kills*.